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score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Patent: WO 02052002-A 132 04-JUL-2002;
Jynavax Technologies Corporation (US)
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/mol type="genomic DNA"
/db_xref="rtaxon:32630"
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AF434914 Citrus va
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D38070 Aspergillus
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Patent: WO 02052002-A 30 04-JUL-2002;
Dynavax Technologies Corporation (US)
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                                                                                                                                                      The nucleotide sequence of this BAC clone was generated by combining Monsanto and RGP-Japan sequencing data.

NOTE: It currently consists of 1 contigs Gaps between the contigs are represented as runs of N. The order of the pieces is believed to be correct as given, however the sizes of the gaps between them are based on estimates that have provided by the submitter. This sequence will be replaced by the finished sequence as soon as it is available and the accession number will be preserved.

* NOTE: This is a 'working draff' sequence.

* This sequence will be replaced by the finished sequence as soon as it is this sequence will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      oasaki,T., Matsumoto,T. and Yamamoto,
Oryza sativa nipponbare(GA3) genomic
clone:OJI136_D07
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Oryza sativa (japonica cultivar-group)
Eukaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
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2 (bases 1 to 119972)
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OJ1136_D07, *** SEQUENCING IN PROGRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Submitted (08-AUG-2001) Takuji Sasaki, National Institute
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                                                /organism="Oryza sativa
/mol_type="genomic DNA"
/cultivar="Nipponbare"
/db_xref="taxon:39947"
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Agrobiological Resources, Rice Genome Research Program; Kannondai 2-1-2, Tsukuba, Ibaraki 305-8602, Japan (B-mail:tsasaki@abr.affrc.go.jp, URL:http://rgp.dna.affrc.go.jp/, Tel:81-298-38-7441, Fax:81-298-38-7468)

This PAC clone has 10 kbp sequence gap, which result in 2 contigs (contig a, b). This sequence shows contig b. The orientation of the sequence is from SP6 to T7 of the PAC clone. Genes were predicted from the integrated results of the following:GENSCANI.0, BLASTNI.4, BLASTX2.0 as well as SplicePredictor (October1998 version). The genomic sequence was searched against the non-redundant database NRP(PIR,SWISSPROT, GENPEPT, PDB) from MAFF DNAbank and the cDNA sequence database at RGP. Protein similarities of the cording regions were searched against NRP with BLASTR2.0. ESTs represent the identified cDNA sequences using BLASTNI.4 with the corresponding DDBJ accession no. and RGP clone ID.
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Published Only in Database (1999)
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Oryza sativa (japonica cultivar-group)
Bukaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
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Submitted (06-JUL-1999) Takuji Sasaki, National Institute
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                                                                                                             /translation="MKHGYVRECEYVAIFDADFQPDPDFLRRTIPFLVHNSDIALVQA
RWRFVNADECLMTRMQEMSLDYHFTVEQEVSSSVCAFFGFNOTAGVWRVSAVNEAGGW
KDRTTVEDMDLAIRASLKGMKFVYLGDVQVKSESVCAFFGFNOTAGVWRVSAVNEAGGW
KDRTTVEDMDLAIRASLKGMKFVYLGDVQVKSELPSTFKAFFRQQHRWSCGPANLFRK
KMLMEIVRNKKYTHVIYNFFLIRKIIAHIVTBAFYCLIIPATIFVEGCVAIFWAINFWLIFKK
CVYIPTITTLLNSGSFRFHLLFFWILFENVNSLHRTKATLIGLLEAGRANEWVVTE
CLGNALKMKSSSKKSFMRWDRLNVTELGVAAFLFSCGWYDLAFGKDHFFIYLF
                                                                                                                                                                                                                                                                                                                                                                                                /clone="P0437H03 (contig b)"
complement(join(1542. .1704,1808. .2005,2133. .2332,
2428. .2541,2732. .2868,3006. .3116,5410. .5554))
/note="Similar to glycogenin glucosyltransferase (EC 2.4.1.186). (Z97341)"
                                                                                   FQGAAFFIVGIGYVGTIVPQS"
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                                                                                                                                                                                                                                                                                                     protein_id="BAA82375"
db_xref="GI:5441877"
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mol_type="genomic DNA"
cultivar="Nipponbare"
db_xref="taxon:39947"
note="hypothetical protein"
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SAARSLMASEVREALESLTVYKYSELEKATAGFSEERRVPGTAVYRGVFNGDAAVKR VSGDVSGEVGILKKVNHCSLIRLSGLCVHRGDYLLVEYAENGALSWILHGSDAATGV LGWRGRVQAFDVADGLNYLHHYTNPPCVHKNIKSSILIDADLHGKSWSFGLARAF LGWRGRVQVAFDVADGLNYLHHYTNPPCVHKNIKSSNLIDADLHGKMSSFGLARAF AGDGAAAAAAQLTRHVVGTQGYLSPEYLEHGLITPKLDVFAFGVVLLELISGKEAASS GDGENGEALLLWESAAEALVDGGGEDAGSNVRAFMDPRLGGDYPLDLAMAVASLAARC
                                                                                                                                                                                                                                                                                                                                                                                                 SPGGYYQHNASHTIRDTGVETYFIIANLTYQGLSTCQALIAQNPLHDSRGLVAGDNLT
VPLRCACESPPQAAGCYKHMVTYLVTWGDTVSAIARFRVDAQSVLDANTLTESSIIY
PFTTLLVPLKNAPTPDHLAPPAQAPPPPAPAPPPRAQPPGGSGSGKGKJAVQUGVGCGV
LALAGVFGLLFFCLRRRRGVGEESVRPGKVVGDVSSSAEYGALASGKQTTTATSMSSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /translation="mytwsskpaedssqqplnykaspetetetnppptspmaetprri
RRGGAGLSLVVVALLLLAVAARAQQEYEANQQNACYATNASSTLGYTCNATSASAAAAA
PCDAYLVFRSSPPLYASAVSISYLLNVAAAAVADSNAVDPVAFVAADRLVLAPVPCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TEEVINELFPHTEENYRDYLRWYLPRTRARVTFTPDAPEPHVAAVTDAYPTHRDRDYF
VARCGRRTSSWSGTTTASRAYRRSRTSTYGTYFARTSSAFERVRRHDRRFHELRRGVR
HLFGRVRQLFLSRSVDPSPTRTGPTSQFYDDDLHGADHHDVLGSSQLGGAPEAHTQEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PVDGVFGWKEDITARFEQVMRLPHLGPTTTLPPYSTVGPSKAWLLQFTRRYAHVQVRR
GYPDFVPEFDRLQPSDVIWEPYTEEAVAARAPLGLSSLCTRDQAYWLTILPMVFDIFV
EPHCPQRVMRQFGLRQVFPGNVQPTVLPADHSLTRRGQLAGALWAPRVQQYVDDWVLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABVYNWVMRGVRECYLKADGGCTCSCMKPKLHHLPCSHVLAAAGDCGISPUVVVSNYF
RKAAIFHTWSEEIYGFGISGSTTTLSAQVFYIPGKKKGRRQTRIRIRNDMDESE
AGMAYDTFALLURGIDRNHRSFLSAVEGAQLGTFRPRTSREMLRVDPHLYPMLVEAAA
DDRDPAKRWDADRSLLAALVDRWRPETHTFHLPCGEMAPTLQDVSYLLGLPLAGAAVG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SSVVGNIGFEPKSIIRHIENKFKYTISYAKAWRAKQKIIEMRYGTFEASYDNLPRLLA
TIAQRNNNTYYDLHTFTSVDDRTKSVLQRAFFSLGACINAFVHCRPVLCIDGTFMTGK
YRGQILTAIGCDGNNQVLPMAFAFVESENTESWYWFLERVHIAVVCMRPNVCLIHDRH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="3' long terminal repeat" complement (join(18782. 19019,19135. .19266,19513. .1961 19855. .20113,20190. .20488,21053. .21389,21495. .21645, 22169. .22464,22743. .22774,23219. .24224) /note="EST C28952(C62945) corresponds to a region of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /translation="MAAPTAAALSTLSTASVTSGKRFITSSFSLSFSSRPLATGVRAA
/draarsaasastvvatiavggklpopatlsyfpdaadgelktvyvaeltagrkavlfa
vpgaftptgsgkklpopfiekagelhakgvdpatakvsspatamkessjelgdabvb
LLSDGNLELTRALGVEMDLSDKPMGLGVRSRRYALLADDGVVKVLNLEEGGAFTTSSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /translation="madegervGIIvDemeredSDneevDDDAsSDeegDvmAtDwAn
eDfSGLVISeGDHVPWEYKENEVIEGARYAHKDERKEAVKHWAVSLQREFRVVKSTNY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="3' long ter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similar to Arabidopsis (AC002292)"
                                                                                                                                              complement (join (32991.
                                                                                                                                                                               VARQPAARPAMDEVFVSLAAVYGSTVDWNPSDHGNSGSSLIGR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 complement (25215. .25521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PEVTPVQAGRVGRAVPPDRLTYSHGHIRAQGRRDRGKRPRQ"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VYEVRCMKEDCPWRVHAYKGKWNDYWKVSIVTEHKCYLQGVEKYHRNITSAFVASEMY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /protein_id="BAA82378.1"
/db_xref="GI:5441880"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similar to maize transposon MuDR mudrA protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EEMLKAL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             complement (16578.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGHEAVLLLLVLRFGSSLSESLARFARTKVCSDSSECDDDDDDSGDESNS"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /translation="mnKEQQGKSIFTMGGWDLTSYNTLSDPASKKPSVAQVNCKCKFS
QCVVQFMETPRVDVEYSLLQQLPLIDTAFLCRKGIDLKKTSRDEHDLRKVTPVYTTIR
                                                                                  /note="Similar to Arabidopsis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /protein_id="BAA82379.1"
/db_xref="GI:5441881"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="5′ long terminal repeat"
join(25810. .25825,29004. .31165)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="ESTs AU070372(S13446),AU075541(S0353) correspond to
a region of the predicted gene.
Similar to Arabidopsis thaliana BAC genomic sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="Similar to putative receptor kinase. (AC002332)"
codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          codon_start=1
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/db_xref="GI:5441879"
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/db_xref="GI:5441878"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             codon_start=1
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                                                                                                                                                  .33608,36271. .36273))
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BAC genomic sequence.
                                                                                                            DNA contig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of the
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   տ
                                                                       l Similarity
16; Conserv
   CGAACGTTCGAGATGA 20
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Sg

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CDS

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/tränslation="WRRVQLRTHTHARNEIALI PRHTHTRTLGMRLHSYHDTR?HCTG
NVQSTHAHTCPVPLNVHACI PPGKRRKTPVPHSVTNMSSSSSSSSSSRSRSSPARS
TPDRRRSPGSPARAGECRDKGGVVEYRVKEREIS PRLVVSSAPRAAKTSRGGGAIE
QSRGGBGILGGVTGGNARPKRYATSQI KAEPELLRREVPLTSGKTKKAPKITFKNEPR
HSAPQSDMGTPDSVPEFGPADEYRALRKKYLLLEDENGELDKQLSQAEEEASVLEDEK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /translation="maaamattaaaaaeeavvaldketlmlmgcgdappaapcaewet
fkenvrplkrgrnvgllnralkahadpaqraallaarrkmieaideysgedplqpwid
cikmvqesfptggdcsglvviyeqcvrafwhddrykndlrylkvwleyagncadsevi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EFPASWSPPKSGGEKLAAAARSRLKRVLSIIQEDA"
complement (join (51409. .51816,53421. .53933))
/note="Similar to Arabidopsis thaliana BAC genomic sequence. (AL021889)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FNEKLNEQTLGVFAVFLSPARGAAPAAAAARSPLKRALSLVEEEA"
complement(join(38463...39039,42006...42013))
/note="Similar to Arabidopsis thaliana BAC genor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /db_xref="GI:5441882"
/translation="MLSCIYRPESDIVVESEAPAPPPPPARVIAADGSLRELPASPCV
AVVSSVLGGGDDAASFFUCNSDALYFDDRPALSPGBELRPGBLYFVLPRAMLGRPLS
SADMGRLAVRASLALVGERPQRRRRHRQGGGKKQKKKYHVNPAQAQSRDDGDGDVDGV
                                                                                                                                                                                                                                                                                                                                                                                                     FALLDQLVVLEGLVDPSQMQPRRRL"
join(58631. .58075,59008. .590
/note="Similar to Arabidopsis
sequence. (AC002332)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /translation="MEGCIASRHAGRTESI, pogppvBAGSGPASYMOVGPAVTSLEGG
PAFCGRGASERVVAAAAAAVFLSCISRRRGSBVPAPAARVIAADGSLKELHAAASPAVA
DVLRGEGESEFVCVRSDTLYFNBQPPAMAPGEALRPGOIYFVLPAAMLGQDLSTADMAA
LAVRASAALAAVKAPRRRGARRGGDRKMKTVRVTPLRDEGLDGGDVLLHEKLNERTLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    complement(join(43967. .44533,45832. .4
/note="Similar to Arabidopsis thaliana
fragment. (Z99707)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /trānslation="metcrrrssshqpapaparvitadgslkelavssavadvlrgeg
egrsffvcnsdalyfneqppalapgealrpgqiyfvlpaamlgqplstadmaalavra
saalaaaaakaprkrgvrrgggdrkkktvrvtplrderldggdvllheklnertlgef
                                                                                                                                                                                                                              FRFLEANQIGQSHTNYYLSYASVMESKNKLKKANEIFNLGIAR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      predicted gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VPAASAADPNSYRRARKGAHRAPERSPFF"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PASWSPPKSGGEKLAAAARSRLKRVLSIIQEDAE"
                                                                                                   /proteIn_id="BAA82386.1"
/db_xref="GI:5441888"
                                                                                                                                                                                                                                                                                                                              /codon_start=1
/protein_id="BAA82385.1"
/db_xref="GI:5441887"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nypothetical protein"
                                                                                                                                                                            oin(66733. .66759,67025. .6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   proteIn_id="BAA82384.1"
/db_xref="GI:5441886"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein_id="BAA82382.1"
/db_xref="GI:5441884"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               note="Similar to
ragment. (299707)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          codon_start=1
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                       76.2%;
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.57365,57427. .57778)
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0;
                          Score 16;
Pred. No
  Mismatches
                          No.
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25;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             corresponds to a region of the
                                                                                                                                                                                                                                                                                                                                                                                                                               167,59212. .59356,59467.
thaliana BAC genomic
  0,
                                               Length 126038;
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JOURNAL
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AUTHORS
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AP005629
LOCUS
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AUTHORS
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VERSION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
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                                                                      SOURCE
ORGANISM
                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                           RESULT 8
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CE 2 (bases 1 to 144952)
CE 2 (bases 1 to 144952)
RS Sasaki, T., Matsumoto, T. and Katayose, Y.
RS Sasaki, T. And Katayose, Y.
RS Sasaki, T. National Institute of Assaria Institute o
                                                                                                                                                                                                                                                                                                                                                                                                                                                           33857 CGAACGTTCGAGATGA 33872
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                                                            unordered pieces.
AC141727
AC141727.1 GI:29123911
HTG; HTGS PHASE1; HTGS_DRAFT.
Apis mellifera (honeybee)
Apis mellifera
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Oryża sativa (japonica cultivar-group)
Eukaryota; viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magmoliophyta; Liliopsida; Foales; Poaceae;
Ehrhartoideae; Oryżeae; Oryża.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16;
                                                                                                                                                                                                                                                             AC141727 146568 bp DNA linear HTG Apis mellifera clone CH224-57G3, WORKING DRAFT SEQUENCE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5 CGAACGTTCGAGATGA 20
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Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Hymenoptera; Apocrita; Aculeata; Apoidea;
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/mol_type="genomic DNA"
/cultivar="Nipponbare"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                clone="OSJNBa0004A19"
30336 c 30932 g 41
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chromosome="2"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RRS MIZHY, D. M., Adama, C., Adio-Oduola, B., Ali-osman, F.R., Allen, C., Alibrooke, S.L., Amaratunge, H.C., Are, J.R., Ayele, M., Banks, T., Alabrooke, S.L., Amaratunge, H.C., Are, J.R., Ayele, M., Banks, T., Alabrooke, S.L., Benton, J., Binage, K., Biankenburg, K., Bonnin, D., Bouck, J., Bowie, S., Brieva, M., Brown, B., Brown, M., Bryant, N.P., Buck, J., Chen, G., Chen, G., Chen, G., Chen, G., Cavazos, S.R., Chacko, J., Chavez, D., Chen, G., Chen, R., Chen, Z., Chowdhry, I., Christopoulos, C., Cleveland, C.D., Cox, C., Coyle, M.D., Dathorne, S.R., David, R., Davila, M.L., Davis, C., Davy-Carroll, L., Dederich, D.A., Davila, M.L., Davis, C., Davy-Carroll, L., Dederich, D.A., Davila, M.L., Davis, C., Denn, A.L., Ding, Y., Dinih, H. H., Douthwaite, K.J., Draper, H., Dugan-Rocha, S., Durbin, K.J., Carcia, A., Garner, T., Garza, N., Gill, R., Carriell, J.L., Dederich, D.A., Davila, M., J., Carcia, A., Garner, T., Garza, N., Gill, R., Gabisi, A., Gao, J., Garcia, A., Garner, T., Garza, N., Gill, R., Garriell, J.H., Guevara, W., Gunaratne, P., Hale, S., Hamilton, K.J., Garcia, A., Garner, T., Garza, N., Gill, R., Harris, C., Harris, K., Hart, M., Havlak, P., Hawes, A., Hernandez, J., Hernandez, J., Hodard, S., Huber, J., Hulyk, S., Hume, J., Jackson, L.E., Jacobson, B., Jia, Y., Johnson, R., Jolivet, S., Joudah, S., Kalay, Y., Lucier, R., Luna, R., Ma, J., Lewis, L.C., Lewis, L., Li, J., Li, Y., Johnson, R., Jucier, R., Luna, R., Ma, J., Louiseged, H., Kartovic, J., Kalay, N., Lee, R., Martindale, A., Martinez, E., Mahseshwari, M., Mapua, P., Martin, R., Mattindale, A., Martinez, E., Mahseshwari, M., Mapua, P., Martin, R., Mattindale, A., Martinez, E., Massey, E., Mawhiney, E., McLeed, M.P., Wedor, M., Mei, G., Metzker, M., Tabor, P., Lu, Quiles, M., Ren, Y., Perez, L., Peters, M., Martindale, A., Tamerisa, A., Tamerisa, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (19-MAR-2003) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA
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Worley, K.C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished
NOTE: Estimated insert size may differ from sequence length (see http://www.hgsc.bcm.tmc.edu/docs/Genbank draft_data.h NOTE: This is a 'working draft' sequence. It currently consists of 25 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as
                                                                                                                                                                                                                                                           Sequencing vector: Plasmid;
Chemistry: Dye-terminator Big Dye: 100% of reads
Assembly program: Phrap; version 0.990329
Consensus quality: 132495 bases at least Q40
Consensus quality: 137202 bases at least Q20
Consensus quality: 140042 bases at least Q20
Estimated insert size: 137866; sum-of-contigs estimation
Quality coverage: 4x in Q20 bases; sum-of-contigs estimation
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Center clone name: CH224-57G3
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Center code: BCM
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RESULT 9
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/db_xref="taxon:7460"
/clone="CH224-57G3"
30537 c 30943 g 39489 t
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6659: gap of unknown length
74127: contig of 7530 bp in length
74227: gap of unknown length
81722: contig of 7495 bp in length
81722: contig of 7495 bp in length
81822: gap of unknown length
92875: contig of 11053 bp in length
92875: gap of unknown length
101243: contig of 8268 bp in length
101343: gap of unknown length
101349: gap of unknown length
113869: contig of 12526 bp in length
113869: gap of unknown length
128447: gap of unknown length
128547: gap of unknown length
128548: contig of 1478 bp in length
146568: contig of 18021 bp in length
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gap of unknown
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Oryza satīva (japonica cultivar-group)

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;

Enrhartoideae; Oryzeae; Oryza.

El (bases I to 166304)

El (bases I to 166304)

Chow, T.-T., Chang, S.-J., Chen, H.-C., Chen, S.-K., Chen, T.-R.,
Chao, Y.-T., Chang, S.-J., Chung, C.-I., Han, S.-Y., Hsiao, S.-H.,
Hsiung, J.-N., Hsu, C.-H., Huang, J.-J., Kau, P.-I., Lee, M.-C.,
Leu, H.-L., Li, Y.-F., Lin, S.-J., Lin, Y.-C., Wu, S.-W., Yu, C.-Y.,
Yu, S.-W., Wu, H.-P. and Shaw, J.-F.
Oryza sativa PAC P0681D04 genomic sequence
                                                           Sequence
AR268334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (bases 1 to 166304)

Chow, T.-Y. and Heing, Y.-I.C.

Direct Submission
Submitted (14-AUG-2002) Institute of Botany, Academia Sinica,
Section 2, Academia Road, Nankang, Taipei 11529, Taiwan
Section 2, Academia Road, Nankang, Taipei Infig.
* NOTE: This is a 'working draft' sequence. It currently
* consists of 6 contigs. Gaps between the contigs
* are represented as runs of N. The order of the pieces
* are represented as runs of N. The order of the pieces
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16; Conserv
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Oryza sativa (japonica cultivar-group) chromosome 5 clone
*** SEQUENCING IN PROGRESS ***, 6 ordered pieces.
                                     AR268334.1
                                                                                                 AR268334
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                                                                                                                                                                                                    CGAACGTTCGAGATGA 99697
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/mol type="genomic DNA"
/cultivar="Nipponbare"
/db xref="taxon:39947"
/chromosome="5"
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37272 c 36481 c
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8678: contig of 8678 bp in length
8778: gap of unknown length
14903: contig of 6125 bp in length
15003: gap of unknown length
35033: contig of 20390 bp in length
35493: gap of unknown length
121324: contig of 85831 bp in length
121324: contig of 18931 bp in length
121324: gap of unknown length
131404: gap of unknown length
13536: contig of 13932 bp in length
13546: gap of unknown length
13546: gap of unknown length
13640: contig of 30848 bp in length.
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Raz, E., Cho, H.J., Richman, D. and Horner, A.A.
Ret, E., Cho, H.J., Richman, D. and Horner, A.A.
Methods for increasing a cytotoxic T lymphocyte
Patent: US 6534062-A 3 18-MAR-2003;
Location/Qualifiers
                                                                                                                                                                  Sequence 3 from patent US AR287743
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RRZ, E., Cho, H.J., Richman, D. and Horner, A.A.
Methods for increasing a cytotoxic T lymphocyte response in vivo
Patent: US 6534062-A 1 18-MAR-2003;
Location/Qualifiers
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Sequence 1 from
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                                                                                                              Unclassified
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                                                                                                                                                                                                                               Carpentier, A.
Patent: FR 2790955-A 2 22-SEP-2000;
ASSIST PUBL HOPITAUX DE PARIS (FR)
                                                                                                                                                                                                                                                                          synthetic construct
synthetic construct
artificial sequences.
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AX046993
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                                                                                                                                                                         /mol_type="genomic DNA"
/db_xref="taxon:32630"
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Location/Qualifiers
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THE IMMUNE RESPONSE CORPORATION (US)
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Methods of modulating an immune response using equences and compositions for use therein patent: WO 011223-A 2 22-FEB-2001;

Dynavax Technologies Corporation (US)
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/mol_type="genomic DNA"
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Dynavax Technologies Corporation (US)
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/db_xref="taxon:32630"
/note="synthetic construct"
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Methods of reducing papillomavirus infection using immunomodulatory polynucleotide sequences Patent: WO 0168117-A 1 20-SEP-2001; Dynavax Technologies Corporation (US)
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Sequence 1 from Patent WO0168117.
AX252291
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Location/Qualifiers
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/note="Polynucleotide containing
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Methods of ameliorating symptoms of herpes infection using immunocublatory polynucleotide sequences patent: WO 0168103-A 1 20-SEP-2001;
Dynavax Technologies Corporation (US)
Location/Qualifiers
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Methods of ameliorating symptoms of herpes infection using immunocollatory polynucleotide sequences patent: WO 0168103-A 2 20-SEP-2001; Dynavax Technologies Corporation (US)
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Dynavax Technologies Corporation (U
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Immunomodulatory formulations and methods
Patent: WO 0168143-A 1 20-SEP-2001;
Dynavax Technologies Corporation (US)
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/mol type="genomic DNA"
/db_xref="reaxon:32630"
/note="Polynucleotide containing
4 c 7 g 5 t
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/mb xref="reaxon:32630"
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Patent: WO 0168143-A 2 20-SEP-2001;
Dynavax Technologies Corporation (US)
Location/Qualifiers
van Nest,G.
Methods of preventing and treating ng immunomodulatory polynucleotide
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Patent: WO 0168116-A 1 20-SBP-2001;
Dynavax Technologies Corporation (US)
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/mol type="genomic DNA"
/mol type="genomic DNA"
/db_xref="reaxon:32630"
/note="polynucleotide containing
to 7 g 6 t
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/mol type="genomic DNA"
/db_xref="taxon:32630"
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Dynavax Technologies Corporation (US)
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Location/Qualifiers
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/note="Polynucleotide containing
3 c 7 g 6 t
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/db_xref="taxon:32630"
/note="Polynucleotide containing
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/organism="synthetic
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/db_xref="taxon:32630"
/note="Polynucleotide c
4 c 7 g
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/mol type="genomic DNA"
/db_xref="taxon:32630"
/note="Artificial sequence is synthesized"
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                      /note="Polynucleotide containing
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                                             /mol_type="genomic DNA"
/db_xref="taxon:32630"
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Dynavax Technologies Corporation (US)
Location/Qualifiers
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
/noTe="Polynucleotide containing
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/mol type="genomic DNA"
/mol xref="taxon:32630"
/note="polynucleotide containing
/note="polynucleotide containing
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Sequence 40 from Patent WO02052002.
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Dynavax Technologies Corporation (US)
Location/Qualifiers
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/db_xref="taxon:32630"
/note="Polynucleotide
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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AX720306
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Location/Qualifiers
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Sequence 1 from Patent WO03000232.
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Dynavax Technologies Corporation (US)
Location/Qualifiers
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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I (bases 1 to 22)

S (Carson,D.A., Raz,E. and Roman,M.

S (Carson,D.A., Raz,E. and Roman,M.

Immunostimulatory polynucleotide/immunomodulatory mol Patent: JP 2001503254-A, 34 13-MAR-2001;

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
OS Artificial Sequence
PN JP 2001503254-A/34

PD 13-MAR-2001
PP 09-CCT-1997 JP 1998518649
PF 09-CCT-1997 UP 1998518649
PF 10-CCT-1996 US 60/028118
PI DENNIS A CARSON,EYAL RAZ,MARK ROMAN
PC A61K39/00,A61K39/385,A61K39/39

CC
FH Key Location/Qualifiers
FT source 1.22
/organism='Artificial Sequence'.
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Patent: WO 03000232-A 1 03-UAN-2003;
Yissum Research Development Company of the Hebrew Univ of Jerusalem (IL); The Regents of the University of California (US)
Location/Qualifiers
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JP 2001503254~A/34.
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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Anti-tumor antigens or their
BD182369
BD182369.1 GI:30793287
WO 02090981-A/1.
                                                                                                                                            Methods of modulating an immune response using immunostimulatory sequences and compositions for use therein Patent: WO 011223-A 3 22-FEB-2001;
Dynavax Technologies Corporation (US)
Location/Qualifiers
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1 (bases 1 to 22)

Hanabuchi,S., Ohashi,T. and Kannagi,M.
Hanabuchi,S., Ohashi,T. and Kannagi,M.
Anti-tumor antigens or their epitopes against HTLV-1 tumor
Patent: WO 02090981-A 1 14-NOV-2002;
JAPAN SCIENCE AND TECHNOLOGY CORP,SHINO HANABUCHI,TAKASHI OHASHI,
                                                                                                                                                                                                                                             artificial sequences.
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SHINO HANABUCHI, TAKASHI OHASHI, MARI KANNAGI
G01N33/15, AG139/00
Description of Artificial Sequence:ISS-ODN
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08-MAY-2001 JP 01P 137526
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                                                                /organism="synthetic construct"
/mol type="genomic DNA"
/db_xref="taxon:32630"
/note="Synthetic construct"
/note 8 c 3 g 6 t
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Dynavax Technologies Corporation (US)
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AX250703
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Dynavax Technologies Corporation (US)
Location/Qualifiers
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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Sequence 3 from Patent WO0168144.
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Patent: WO 0168117-A 3 20-SEP-2001;
Dynavax Technologies Corporation (US)
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Barnett, M.J., Fisher, R.F., Jones, T., Komp, C., Abola, A.P.,
Barloy-Hubler, F., Bowser, L., Capela, D., Galibert, F., Gouz
Gurjal, M., Hong, A., Huizar, L., Hyman, R. W., Kahn, D., Kahn,
Kalman, S., Keating, D.H., Palm, C., Peck, M.C., Surzycki, R.,
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                                                                                                                                            Sinorhizobium meliloti (Rhizobium meliloti)
Sinorhizobium meliloti
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            artificial sequences.
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                                                                                                     Bacteria; Proteobacteria; Alphaproteobacteria; Rhizobiales;
Rhizobiaceae; Sinorhizobium/Ensifer group; Sinorhizobium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
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/db xref="taxon:32630"
/note="Polynucleotide containing CG"
8 c 3 g 6 t
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8 c 3 g 6 t
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Pred. No.
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Pred. No.
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      apela,D., Galibert,F., Gouzy,J.,
Hyman,R.W., Kahn,D., Kahn,M.L.,
C., Peck,M.C., Surzycki,R.,
                                                                                                                                                                                                                                                               pSymA
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91;
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91;
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MEDLINE
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2 (base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wells,D.H., Yeh,K.-C., Davis,R.W., Federspiel,N.A. and Long,S.R. Nucleotide sequence and predicted functions of the entire Sinorhizobium meliloti pSymA megaplasmid Proc. Natl. Acad. Sci. U.S.A. 98 (17), 9883-9888 (2001)
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                                                                                                                       /translation="mpadlaartsskifngvdlmdasaradnafyldrogerresnars
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VSFRGAYHGMSGSLSLMGSLGPKASVGQLVPCAHFFYYPAYRCPFGRGNETATLA
ASYFERALRDPEGGINRPAAVILEAVQGEGGVIPAFVENLARTVTRDLGIPLIVDE
VQSGVGRTGSFYAFQKAGIIPDVVLSKAIGGGLPLAVVIXRDDLDLMKPGAHAGTFR
GNQLAMAAGSKTLEIIERERLVERAAIAGRRLRANLERIAAQTFYIGEVRGEGGLMCS
EVVDPEGLPDALGHPPHGOEIARMIQHEMFRAGIILETGGRFGSVLRLLPPLVISDAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VASPEAPLRRRASLFGFFRRPNAMMILAFALTYRASEGLVRGMEGSYLVDSKVPTEWI
GYMSGAAAATAGLLGALIAALIIRKAGLTATLILLGGLRSLCFLAFALNAFGIWPGIA
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                                                                                                                                                                                                                                                                                                                                                                                   /note="glimmer prediction; identical to RhsA (RhbA) fr
Sinorhizobium meliloti, AAD009412, Q9Z3R2;
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rhizobactin siderophore biosynthesis pathway"
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2931. .4418
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /product="putative transmembrane transport protein"
/protein_id="AAK65915.1"
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/note="glimmer prediction; similar to signal transducer
Irp8 from Yersinia enterocolitica, CAB46571"
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|gene="rhbA"
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                                                                                                                                                                                                                                                                                protein_id="AAK65916.1"
db_xref="GI:14524429"
                                                                                                                                                                                                                                                                                                                                                                                                                                                               function="Cell processes; Transport of small molecules; ncorporation metal ions"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene="rhbA"
EC_number="2.6.1.46"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                note="synonym: 522. .2934
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                                                                    gene="rhbB"
                                                                                                         DQVSGALAAAFERLGRKAA"
                                                                                                                                                                                                                                                                                                                         product="RhbA diaminobutyrate-pyruvate aminotransferase"
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/function="Cell processes; Transport of small molecules; incorporation metal ions" /note-"glimmer prediction; identical to RhsC (RhbC) from Sinorhizobium meliloti; Q9Z3R0, AADO9414"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               /function="Cell processes; Transport of small molecules; incorporation metal ions" /note="glimmer prediction; identical to RhsD (RhbD) from Sinorhizobium meliloti, Q923Q9, AFI10737"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DLLNRTHSSRLLIBALHARNGDLAALAGDEVGFVAAEGGLLACHGIHPCPKSREGMT
EAESRRYSPEFAAGFPLRWFAYDSELFHTGHSQGSPSAEWLKEAMGSDIDALKAPET
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MLWSLGVGITNSVRVNLARELLRGDDMYRFRRHELWQDFSRSYPGLTLIPDPAFMGV
KIDGALIDGLSVSMRENFTGANADRNVSLLAAVCENLPDRGSELGALLRNRAHLERR
PLDIVARDWFBRFLTIFVRFJFGSLYLHGIAWGALCHVENDG
FFHHERAHGALVEALPGFGEPSESVFGEEPVDERLLYYAFINSVLGMVGALGREGLVS
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ASKADYLNPEDAVFADAPNLVERSMQTTRRADALKILMTMRAIGRDGLDALICQTLQN
THAAAEAVKTREYLSLAGPPSLSTVLFRYVSARGPKFADAITLKTRAALFNAGIAALA
                                                            /note="synonym: 6742. .8112
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                                                                                                                                                                                                                                                                                                                                                         protein"
                                                                                                                                                                                                                                                                                                                                                                              /product="RhbD Rhizobactin siderophore biosynthesis
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/transl_table=
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/note="synonym:
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/function="Cell
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processes; Transport of small molecules;
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ORGANISM
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2 (bases 1 to 11853)
Lynch,D., O Connell,M. and
Cloning and sequence analys
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J. Bacteriol. 183 (8), 2576-2585 (2001)
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Sinorhizobium meliloti
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Lynch,D., O'Brien,J., Welch,T.,
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CAKLAARGGSVDTHYMMPVHPMOWDHMIVPHFAADIAAGHIVFLGKGDDLYLPQOSVR
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/note="glimmer prediction; identical to RhsE (RhbE) from
/sinorhizobium meliloti, Q9Z3Q8, AAD09416"
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/transI_table=11
/product="RhbF Rhizobactin
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inorhizobium meliloti, Q9Z3Q7, AAD09417"
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3096. .9901
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transl_table=
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    M. and O Brien, J. analysis of the Sinorhizobium meliloti 2011
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Submitted (03-DEC-1998) School of Biotechnology, Dublin City University, Glasnevin, Dublin, Leinster Dublin 9, Ireland
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Lynch,D., O Connell,M. and O Brien,J.
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/transl_table=11
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GNOLMMAAGSKTLEIIERERLVERAAIAGRRLRANLERIAAQTFYIGEVRGEGLMLGV
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THAAAEAVKTREYLSLAGPPSLSTVLFRYVSARGPKFADAITLKTRAALFNAGIAALA
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/transl_table=
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| Ob_xref="GI:4151933"
| translation="MHAHNAATLTLRSLLNCVAREFPDHVRWLETQGHLRFMLTFPEG
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/function="siderophore_biosynthesis"
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/function="siderophore biosynthesis"
/note="similar to DABA decarboxylase"
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GGSLGLPAHYRSATGHHLFGEPVMLTDENGAKTUDAVEALSAVIERLERSIAAKOGRV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             product="RhbE"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             note="similar to AlcA"
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function="siderophore biosynthesis" note="similar to IucC"

transi

table=11

product="RhbF"

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RESULT 57
AF381613
LOCUS
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JOURNAL
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MEDLINE
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                                                                                                     2 (bases 1 to 18662)
Jones, B.F. and Hotez, P.J.
Direct Submission
Submitted (17-MAY-2001) Department of Epidemiology and Public Health, Yale University School of Medicine, 60 College St., Ne Haven, CT 06510, USA
                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Strongylida; Ancylostomatoidea; Ancylostomatidae; Ancylostomatinae; Ancylostoma.

1 (bases 1 to 18662)

Jones, B.F. and Hotez, P.J.

Molecular cloning and characterization of Ac-mep-1, a developmentally regulated gut luminal metalloendopeptidase from adult Ancylostoma caninum hookworms

Mol. Biochem. Parasitol. 119 (1), 107-116 (2002)
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                                                               Location/Qualifiers
1. .18662
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Query Match
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                                                                                                                                                                This sequence was identified as CDM:10210347 by the submitter. For further information on this sequence e-mail to fly@celera.com. * NOTE: This is a 'working draft' sequence. * This sequence will be replaced * by the finished sequence as soon as it is available and * the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AC013960.1 GI:6437375
HTG; HTGS PHASE2.
Drosophila melanogaster (fruit fly)
Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
1 (bases 1 to 83321)
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15; Conserv
                                                                                                                                                                                                                                                                                                                                            Submitted (16-NOV-1999) Celera Genomics, 45 West Gude Drive, Rockville, MD, USA
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                                                                                                                                                                                                                                                                                                                                                                                                        Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                Adams, M. and Venter, J.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAACGTTCGAGATGA 10692
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22661 a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCVHHTRARKPIDNSKNVLIEMRDLFGGIPFLNHTLKKDIDFFDIMGKFEQNHAMGTL
LGAMVSVDFKNVNKHSLFLSQPYLSMARDFYVFPQHTKMVENRVSLINSVLRSFAKAV
LDDPSPYLDLMSRSARDVVKLEMQIAMASXPESELRNYAQQHNPRTLDQLKAAYPAIK
                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                product="metalloendopeptidase"
join(12956. .12983,13860. .14239,15228. .15300,15357. .1
15607. .15689,15756. .15914,16878. .17031,17116. .17184,
17252. .17380,17443. .17544,17599. .17696,17963. .18060,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene="MEP-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'gene="MEP-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     codon_start=1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3816 g
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r. *** SEQUENCING
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transl_table=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 note="similar to
                                                                                                                                                                                                                                                                                              note="ATP synthase CF1 epsilon chain"
                                                                                           71.4%;
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                                                                                             Score 15;
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TITLE
JOURNAL
REFERENCE
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AUTHORS
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VERSION
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Matches 15; Conserv
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Ephydroidea; Drosophilidae; Drosophila.

25 1 (bases 1 to 168448)
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Celniker,S.E., Adams,M.D., Kronmiller,B., Tyler,D., Wan,K.H.,
Rogers,Y., An,H., Baldwin,D., Banzon,J., Beeson,K.Y., Busam,D.A.,
Carlson,J.W., Center,A., Champe,M., Davenport,L.B., Dietz,S.M.,
Dodson,K., Dorsett,V., Doup,L.E., Doyle,C., Dresnek,D., Farfan,D.,
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McIntosh,T.C., Moy,M., Murphy,B., Nelson,C., Nelson,K.A., Nunco,J.,
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Phouanenavong,S., Pittman,G.S., Puri,V., Richards,S., Scheeler,F.,
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Sequencing of Drosophila chromosome 3R, region 83A-83B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Celniker, S.E., Agbayani, A., Arcaina, T.T., Baxter, E., Blazej, R.G. Butenhoff, C., Champe, M., Chavez, C., Chew, M., Ciceiolka, L., Doyle, C.M., Farfan, D.E., Galle, R., George, R.A., Harris, N.L., Hoskins, R.A., Houston, K.A., Hummasti, S.R., Karra, K., Kearney, L., Kim, E., Lee, B., Lewis, S., Li, P., Lomotan, M. A., Mazda, P., Moshrefi, A.R., Moshrefi, M., Nixon, K., Pacleb, J.M., Park, S., Pfeiffer, B., Poon, L., Sequeira, A., Sethi, H., Snir, E., Pfeiffer, B., Poon, L., Sequeira, A., Sethi, H., Snir, E., Svirskas, R.R., Wan, K.H., Weinburg, T., Zhang, R., Zieran, L.L. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This sequence was assembled using end sequences from a whole genome shotgun and from subclones of this BAC and its neighboring clones. For further information about this sequence, including its location and relationship to other sequences, please visit our sequence archive Web site (http://www.fruitfly.org/sequence/) or send email to bdgp@fruitfly.berkeley.edu.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (17-AUG-1999) Drosophila Genome Center, Lawrence Laboratory, MS 64-121, Berkeley, CA 94720, USA On Feb 22, 2001 this sequence version replaced gi:7143384.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence submitted by:
Berkeley Drosophila Genome Project
Lawrence Berkeley National Laboratory,
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     71.4%; Score 15; DB 3; L
ilarity 100.0%; Pred. No. 1.1e+02;
Conservative 0; Mismatches 0;
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                                                                                                                                                                   /clone_lib="RPCI-98 (Roswell Park Cancer Institute Drosophila melanogaster BAC library, partial EcoRI pBACE3.6)"
                                                                                                                                                                                                                                                                                                                                                                      /organism="Drosophila melanogaster"
/mol_type="genomic DNA"
/strain="½; cn bw sp"
                                                                                                                                                                                                                                                                                    map="83A-83B"
                                                                                                                                                                                                                                                                                                                 db_xref="taxon:7227"
chromosome="3R"
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33B, BAC clone
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Busam, D.A.,
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TITLE
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Streptomyces coelicolor A3(2) complete genome; segment 23/29.
AL939126 AL009199 AL023517 AL023702 AL031514 AL034446 AL034492
AL035212 AL035478 AL049727 AL132824 AL132997 AL589708 AL591522
AL645882
AL645882
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On or before Oct 26, 2002 this sequence version replaced gi:20520744, gi:20520662, gi:20520663, gi:20520667, gi:20520669, gi:20520761, gi:20520816, gi:2052067, gi:20520820, gi:20520846, gi:20520823, gi:20520883, gi:20520869.
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Streptomyces coelicolor A3(2)
Bacteria, Actinobacteria, Actinobacteria, Actinomycetales,
Streptomycineae; Streptomycetaceae; Streptomyces.
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Complete genome sequence of the model actinomycete Streptomyces coelicolor A3(2)
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Direct Submission
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                                                                                                                                                                                                                       /gene="SCO6005"
/note="SC787.02, possible lipoprotein, len: 469; has similarity to signal sequence of Mycobacterium leprae hypothetical protein TR:E334742 (EMBL:Z98604) MLCB2052.27 (445 aa), fasta scores; opt: 75 z-score: 199.2 E(): 0.0062, 23.3% identity in 335 aa overlap. Contains N-terminal signal sequence and appropriately positioned PS00013 Prokaryotic membrane lipoprotein lipid attachment
                       /translation="MTIRAGSLDRRTLLRGAIATAAMGSFAVACSSPSSEDKESDSGP
KGEKSANNPFGAAANSTVEAAIFDGGYGTDYVDYANQVLGSQVKGLKVQVKPVVDIAP
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/mol_type="genomic DNA"
/strain="A3(2)"
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                                                                                                                                                /transī_table=11
                                                                                                                                                                                                                                                                                                                                                                                                                                                       'note="synonym:
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stem_loop
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                                               /gene="SCO6007"
/note="PS00402
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                          inner membrane
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/codon_start=1
/trans1 table=11
/product="probable transmu/protein_id="CAA15783.1"
/db_xref="GI:2661678"
                                                                                                                                                                                                                                                                                                                                                                            /note-"SC707.04, probable integral membrane transport /note-"SC707.04, probable integral membrane transport protein, len: 301 aa; similar to many members of the MALF subfamily of the binding-protein-dependant transport systems membrane proteins eg. TR:006111 (EMBL:X66092) putative transport system permease protein from Clostridium perfringens (275 aa), fasta scores; opt: 590 z-score: 796.5 E(): 0, 33.6% identity in 265 aa overlap. Contains PS00402 Binding-protein-dependent transport systems inner membrane comp signature"
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VPGGGGFOLPOKOALIWSNDQKALLYPSGGMEVLEKKKATKADFOMTGIESMTLTDKPA
LPYEBALRAAAGEPFIVPKQGKWPAGGKEVLRANLSEKAAANESKTKLAPIVKGTUPS
DGYGSTALVSQTKMLEAAGTNIFNYMFVETYGLNTDQLVPWNSFLAGDLDGKGLTSAL
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                                                                        /trānslation="msviaadrkpasdrkpvsdrklaraaassdrrfaaishallilm
Svivivpmlwylmssrksygsillssprslydhwrfbnyanawydanigkyflusvivu
Vsalilvmllgamcayvlaarefpgrrliyymlagifpevplaivplpfolonfgll
NTRPGLILTYVAFALPFTMFFLYSFFRSLPHDVYEAALIDGAGDWRAFFQVMLPMARP
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fasta scores, opt: 393 z-score: 636.8 E(): 2.6e-28, 32.5%
identity in 280 aa overlap. Contains PS00402
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GMAAVAIENELGLMNQELLEVALNTDQDKWVLTQGMAAYASSQVYDIDYGALEAAIVV
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                                                                                                                                                                                                        /product="probable transmembrane transport protein"
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2999. .3907
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/transl_table=11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Binding-protein-dependent component signature"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SC7b7.03"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            of SC7b7.04"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   transport systems
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MALFG
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Binding-protein-dependent transport systems comp signature"

SOURCE

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RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_feature
62
                                                                                   17025
                                                                                                                                                                                                 15;
                                                                                                                                                                                                                           Similarity
                                                                             TCGTCGAACGTTCGA 17039
                                                                                                                                     TCGTCGAACGTTCGA 15
                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="SC787.06, probable solute-binding protein of transmembrane transport system, len: 403 aa; similar to many eg. XXIF_ECOLI P37387 d-xylose-binding periplasmic protein precursor (330 aa), fasta scores; opt: 619 z-score: 573.4 E(): 8.9e-25, 35.7% identity in 35 aa overlap. Contains N-terminal signal sequence and appropriately positioned Ps00013 Prokaryotic membrane lipoprotein lipid attachment site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /product="solute-binding protein"
/protein_id="caal5786.1"
/protein_id="caal5786.1"
/db_xref="Gi:2661681"
/translation="MNTRMRRAAVAVATTAMAVSLAACGSAKESDGGSDSSDSAAKKG
/translation="MNTRMRRAHVAVATTAMAVSLAACGSAKESDGGSDSSDSAAKKG
/translation="MNTRMRRHAHVAVATTAMAVSLAACGSAKESDGGSDSASLQNQQVDTM
/translation="MNTRMRRHHAHVAVAVATTAMAVSLAACGSVYSAKAKGDASLQNQQVDTM
/translation="MNTRMRRHHAHVAVATTAMAVSLAACGSVXKAKGDASLQNQTOTM
/translation="MNTRMRRHHAHVAVATTAMAVSLAACGSVXKGREYDTKEWKPE"
GEALLKALIGDKAXDQJTVMNNGSSTDPNAAQFKEGAHSYLDGKYKIGREYDTKEWKPE
GEALLKALIGDKAXDQJTVMNNGSSTDPNAAQFKEGAHSYLDGKYKIGREYDTKEWKPE
NANANMEAAISALGKDKIDGYYSANDGMAGGSITALKRAGIADIPVTGQDAELAGVQR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5462.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SNIVRELKDGGTVEVTPTSAGGRRARSVSLSGDAGIVIGVDFGHTHLRVAVGNLAHQV
LAEESEPLDVDASSDQGFDRAEQLVSRLIEATGVDRAKIAGVGLGVPGPIDVESGTLG
STAILPGWGGIRPAEELRGRLGVPVHVDNDANLGALGELVWGGGRGVRDLAYIKVASG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="SC787.05, probable transcriptional repressor protein, len 403 aa; similar to many eg. XYLR ANATH Q44406 xylose repressor from Anaerocellum thermophilm (399 aa), fasta scores; opt: 548 z-score: 767.3 E(): 0, 33.1% identity in 393 aa overlap. Contains PS01125 ROK family signature and helix-turn-helix motif at aa positions 29-50
                                                                                                                                                                                                                                                                                                                                                                                                     SLTKDNIKETVIKDGFYTIDEICTDKYKAACDKIGLK" 5514. .5546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="hairpin loop with 23bp stem"
4128. .4131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5475.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ELVLGPIRESVGRYAIPSAARQLSVLPGALGGRAEVLGALALALSEMGDSTLLDGSAT
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HGTDLTMEGVVRLARDGDPGCRRVIADVGRHIGSGVANLCNLLNPSRVVLGGDLAEAG
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4142. .5353
                                                                                                                                                                                                                                                                                                        /gene="SCO6009"
/note="PS00013 Prokaryotic membrane
attachment site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                          IVTGEQYMSVFKSYPKEAETAAEMAVALAKGESLDSIANDKVDSATTKGVPAVIVPVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /gene="SCO6008"
/note="PS01125 ROK family signature"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /product="probable transcriptional repressor protein"
/protein id="CAA15785.1"
/db_xref="GI:2661680"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /codon_start=1
/transl_table=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /gene="SCO6009"
/note="synonym: SC7B7.06"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   translation="METPGSQSSLHRANLERVVRAVRLAGSLTQAEIARTTGLSAATV"
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/transl_table=
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                                                                                                                                                                                                                           100.0%;
                                                                                                                                                                                                                                                      71.4%;
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                                                                                                                                                                                           Score 15; DB 1; L; Pred. No. 1.1e+02; 0; Mismatches 0;
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                                                                                                                                                                                                                                                   Length 295150;
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VERSION
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JOURNAL
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                                             AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Addms, M.D., Celniker, S.E., Holt, R.A., Evans, C.A., Gocayme, J.D., Andams, M.D., Celniker, S.E., Li, P.W., Hookins, R.A., Galle, R.F., George, R.A., Lewis, S.E., Richards, S., Ashburnar, M., Henderson, S.N., Sutton, G.G., Wortman, J.R., Yandell, M.D., Zhang, Q., Chen, L.X., Button, G.G., Wortman, J.R., Yandell, M.D., Zhang, Q., Chen, L.X., Brandon, R.C., Rogers, M.H., Blazej, R.G., Champe, M., Pfeiffer, B.D., Wan, K.H., Doyle, C., Barker, B.G., Helt, G., Champe, M., Pfeiffer, B.D., Barloun, R.C., Rogers, M.H., J., Andrews-Pfannkoch, C., Baldwin, D., Ballew, R.M., Basu, A., Baxendale, J., Bayraktaroglu, L., Beasley, E.M., Beeson, K.Y., Benos, P. V., Berman, B.P., Bhandari, D., Botshakov, S., Borkova, D., Botchan, M.R., Bouck, J., Brokstein, P., Brottier, P., Bartis, K.C., Busan, D.A., Butler, H., Cadleu, E., Center, A., Dietz, S., Chandra, I., Cherry, J.M., Cawley, S., Dahlke, C., Davenport, L.B., Davies, P., de pablos, B., Delcher, A., Deng, Z., Mays, A.D., Dew, I., Dietz, S.M., Dodson, K., Doup, L.E., Downes, M., Duyan-Rocha, S., Dietz, S.M., Dodson, K., Doup, L.E., Downes, M., Duyan-Rocha, S., Dietz, S.M., Dodson, K., Doup, L.E., Downes, M., Duyan-Rocha, S., Dietz, S.M., Dodson, K., Doup, L.E., Downes, M., Duyan-Rocha, S., Dietz, S.M., Dodson, K., Doup, L.E., Downes, M., Duyan-Rocha, S., Dietz, S.M., Dodson, K., Doup, L.E., Downes, M., Duyan-Rocha, S., Charler, A., Wolf, R., Gorg, F., Gorrell, J.H., Gu, Z., Gelbart, W.M., Glasser, K., Glodek, A., Gong, F., Gorrell, J.H., Gu, Z., Gelbart, W.M., Harris, M.L., Harvey, D., Helman, T.J., Hernandez, J.R., Houck, J., Hostin, D., Houston, K.A., Howland, T.J., Hernandez, J.R., Houck, J., Hostin, D., Houston, K.A., Karpen, G.H., Ke, Z., Kravitz, S., Kulp, D., L., Rako, P., Lei, Y., Levitsky, A.A., L., Li, J., Li, Z., Liang, Y., Lian, X., Lianko, P., Lei, Y., Levitsky, A.A., L., Li, J., Liang, Y., Lin, X., Lin, X., Mattel, B.M., Murphy, L., Mattel, B.M., Murphy, L., Marty, G., Williams, S.M., Wonds, Y., Sand, N., Wond, K., Shen, H., Shue, B.C., Siden-Kiamos, I., Stapl
                                                                                                                                                                              Celniker, S.E., Adams, M.D., Kronmiller, B., Wan, K.H., Holt, R.A., Evans, C.A., Gocayne, J.D., Amanatides, P.G., Brandon, R.C., Rogers, Y., Banzon, J., An, H., Baldwin, D., Banzon, J., Beeson, K.Y., Busam, D.A., Carlson, J.W., Center, A., Champe, M., Davenport, L.B., Dietz, S.M., Dodson, K., Dorsett, V., Doup, L.E., Doyle, C., Dresnek, D., Farfan, D., Ferriera, S., Frise, E., Galle, R.F., Garg, N.S., George, R.A., Gonzalez, M., Houck, J., Hoskins, R.A., Hostin, D., Howland, T.J., Ibegwam, C., Jalali, M., Kruse, D., Li, P., Mattei, B., Moshrefi, A., McIntosh, T.C., Moy, M., Murphy, B., Nelson, C., Nelson, K.A., Nunoo, J., Pacleb, J., Paragas, V., Park, S., Patel, S., Pfeiffer, B., Phouanenavong, S., Pittman, G.S., Puri, V., Richards, S., Scheeler, F., Stapleton, M., Strong, R., Svirskas, R., Tector, C., Tyler, D., Williams, S.M., Zaveri, J.S., Smith, H.O., Venter, J.C. and Rubin, G.M.
3 (bases 1 to 296091)
Misra, S., Crosby, M.A., Mat
Campbell, K., Hradecky, P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Drosophila melanogaster (fruit Drosophila melanogaster
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AE003602 AE014297
AE003602.3 GI:231
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Drosophila melanogaster
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                                                                                                                                                    Sequencing of Drosophila melanogaster genome
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      to 296091)
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Matthews,B.B., Bayraktaroglu,L.,
P., Huang,Y., Kaminker,J.S., Prochnik,S.E.,
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Annotation of Drosophila melanogaster genome
Unpublished (bases 1 to 296091)
Adams,M.D., Celniker,S.E., Gibbs,R.A., Rubin,G.M. and Venter,C.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pirect Submission
Submitted (13-FEB-2003) University of California Berkeley, 539 Life Sciences Addition, Berkeley, CA 94720, USA
Sequence update by submitter
On Sep 18, 2002 this sequence version replaced gi:10727155.
Location/Qualifiers
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                                                                                                                 linear BCT complete genome,
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•	CDS	gene			CDS 3	gene 3			rce	Tel:81-438	Kazusa-kamatari, (E-mail:kaneko@k	JOURNAL Submitted Institute	Direct Sul		MEDLINE 22485002			AUTHORS Kaneko, T., N	 _	TITLE Complete genomic		
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AX592408.1 GI:27950510
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Immunomodulatory polynucleotides and methods of using the same Patent: WO 02052002-A 98 04-JUL-2002; Dynavax Technologies Corporation (US)
                                                                                                     synthetic construct synthetic construct
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                                                   Fearon, K.L. and Dina, D.
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AX592339
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Location/Qualifiers
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RESULT 68
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Immunomodulatory polynucleotides and methods of using Patent: WO 02052002-A 23 04-JUL-2002;
Dynavax Technologies (05)
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Patent: WO 02052002-A 44 04-JUL-2002;
Dynavax Technologies Corporation (US)
Location/Qualifiers
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                    /organism="synthetic construct"
/mal_type="genomic DNA"
/mbl_type="genomic DNA"
/mble="polynucleotide containing
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                      note="n = 5-bromocytocine"
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Patent: WO 02052002-A 55 04-JUL-2002;
Dynavax Technologies Corporation (US)
Location/Qualifiers
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Sequence 55 from Patent W002052002.
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/mol type="genomic DNA"
/mol xref="taxon:32630"
/note="Polynucleotide containing
/note to 7 g 5 t
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Sequence 1 from Patent WO0143778.
AXI74913
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Sequence 9 from Patent WO0168103
AX252517
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/mol type="genomic DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing
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AX592311
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Sequence 1 from Patent WO02052002
AX592311
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Dynavax Technologies Corporation (US)
Location/Qualifiers
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Sequence 11 from Patent WO0168077.
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                                                                                    248 ACGTTCGAGATGAT 261
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The cDNA library to be analyzed within the framework of this project was created using a Botrytis cinerea strain which was grown under conditions of nitrogen deprivation, which is the normal situation for B. cinerea during its development on its host plant. The library was produced in an oriented direction, in the pBSII
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cDNA library; nitrogen deprivation.

Botryotinia fuckeliana

Botryotinia fuckeliana

Botryotinia fuckeliana

Botryotinia; Pungi; Ascomycota; Pezizomycotina; Leotiomycetes;

Helotiales; Sclerotiniaceae; Botryotinia.

1 (bases 1 to 600)

Bitton,F., Levis,C., Fortini,D., Pradier,J.M. and Brygoo,Y.

Direct Submission
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Botrytis cinerea strain T4 cDNA library under conditions of
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/mol_type="mRNA"
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BU095678
                                                                                                                                    Email: dsanchez@ilb.unsam.edu.ar
Email: dsanchez@ilb.unsam.edu.ar
Sequences were basecalled with phred and vector was masked with
crossmatch (see http://www.phrap.org). Sequences were then trimmed
from both ends to remove low quality bases and masked vector.
                                                                                                                                                                                                            Genomics and Bioinformatics
Instituto de Investigaciones Biotecnologicas
Av. Gral Paz S/N, INTI, Edificio 24, B 1650 KNA,
                                                                                                                                                                                                                                                               genes
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       /dev_stage="blood trypomastigote"
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/clone_tib="tca"
/note="Vector: pSport1; Blood trypomastigotes were
obtained from goldfish and cultured as described (Ove
et al. Parasitol Res (1998) 84:343) before obtaining
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/mol_type="mRNA"
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1 (bases 1 to 337)

Whitfield,C.W., Band,M.R., Bonaldo,M.F., Kumar,C.G., Liu,L., Pardinas,J., Robertson,H.M., Soares,B. and Robinson,G.E.

Annotated expressed sequence tags and cDNA microarrays for studies of brain and behavior in the honey bee Genome Res. 12 (4), 555-566 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Apis mellifera (honeybee)
Apis mellifera
Apis mellifera
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Hymenoptera; Apocrita; Aculeata; Apo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BI511039 337 bp mRNA linear BB160004A20G12.5 Bee Brain Normalized Library, BB16 cDNA clone BB160004A20G12 5', mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This research was funded by the University of Illinois Critical Research Initiatives Fund and a Burroughs-Wellcome Trust Innovation Award in Functional Genomics to G.E. Robinson and an NSF Postdoctoral Fellowship in Bioinformatics to C.W. Whitfield.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            505 S. Goodwin Ave., Urbana, Tel: 217 265 0309
Fax: 217 244 3499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Gene E. Robinson
Department of Entomology
University of Illinois
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BI511039.1 GI:15361413
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BACKWARD: ATTAACCCTCACTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Plate: BB160004A20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCR PRimers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: generobi@life.uiuc.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11932240
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Conservative 0; Mismatches
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a 35 c 40 g 59 t
/Clone lib="Bee Brain Normalized Library, BB16"
/note="Organ: brain; Vector: pT7T3-Pac; Site_1: EcoR1;
/note="Not1; The BB16 library was contributed by the
Soares laboratory and it was constructed and normalized
as described by Bonaldo, M.F., Lennon, G. and Soares,
M.B. (1996), Genome Research 6(9): 791-806. RNA was
                                                                                                                                                                                                                                                                        /organism="Apis mellifera"
/mol_type="mRNA"
/strain="mixed strains of
.m. ligustica"
                                                                                                                                                                                                                                                                                                                                                                                      Cocation/Qualifiers
                                                                                                                                     dev_stage="adult worker honey bee"
lab_host="DH10B"
                                                                                                                                                                             'tissue_type="brain"
                                                                                                                                                                                                         sex="female"
                                                                                                                                                                                                                              clone="BB160004A20G12"
                                                                                                                                                                                                                                                   _xref="taxon:7460"
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                                                                                                                                                                                                                                                                                               European bees, predominantly
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prepared from dissected brains of adult worker bees of

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ACCESSION
VERSION
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AI945022/c
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gene discovery using computational and microarray analysis of transcription in the drosophila melanogaster testis Genome Res. 10 (12), 2030-2043 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Drosophila melanogaster (fruit fly)
Drosophila melanogaster
Drosophila melanogaster
Eukaryota, Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Eukaryota; Bndopterygota; Diptera; Brachycera; Muscomorpha;
Neoptera; Endopterygota; Diptera; Drosophila.
Ephydroidea; Drosophilidae; Drosophila.
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AI94502.y1 Drosophila melanogaster adult testis library Drosophila melanogaster cDNA clone bs08b02 5', mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Laboratory of Cellular and Developmental Biology
NIDDK, National Institutes of Health
6 Center Drive MSC 2715, Bldg 6, Rm Bl-13, Bethesda, MD 20892 USA
Fax: (301) 496 5239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequencing Center (NISC; see http://www.nisc.nih.gov). Plate: 08 row: b column: 02 Seq primer: M13RP1 reverse primer (ABI).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              http://www.niddk.nih.gov/intram/people/boliver.htm
Tissue isolation and library construction performed at the National
Institute of Diabetes and Digestive and Kidney Diseases, NIH (see
http://www.niddk.nih.gov/intram/people/boliver.htm). DNA sequencing
and analyses performed by National Institutes of Health Intramural
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          On Aug 17, 1999 this sequence version replaced gi:5735420
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Andrews J., Bouffard, G.G., Cheadle, C., Lu, J., Becker, K.G. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AI945022
AI945022.2 GI:9990370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Brian Oliver
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: oliver@helix.nih.gov,
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/dev stage="1-5 day adult"
//dev stage="1-5 day adult"
//dev stage="50LR (Stratagene)"
//clone lib="Drosophila melanogaster adult testis library"
//note="forgan: testis; vector: pBlueScript SK (Stratagene);
Site_1: EcoR I; Site_2: Xho I; Testes dissected from 1-5
day adult y[*] w[67c1]/y males raised at 25oC. RNA
isolated using Trizol (Life Technologies) and a single
round of Poly(A) + selection using Oligotex (Qiagen). cDNA
library constructed using Stratagene ZAP-cDNA syntesis
kit. Oligo dT-primed, size fractionated -1-6 kb, and
directionally cloned at EcoRI and XhoI in Uni-ZAP XR.
Following a single round of amplification pBlueScript SK
phagemids were mass excised. A distribution channel for
clones is being sought, but not currently available.
Requests for clones cannot be honored."
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3 59 c
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                                                                                                                                                                                                                                                                                                                                                                                                                                /sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /strain="y[*] w[67c1]/Y"
/db_xref="taxon:7227"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Drosophila melanogaster"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                        clone="bs08b02"
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Pred. No. 78;
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Whitfield, C.W., Band, M.R., Bonaldo, M.F., Kumar, C.G., Liu, L.,

Pardinas, J., Robertson, H.M., Soares, B. and Robinson, G.B.

Annotated expressed sequence tags and cDNA microarrays for studies

of brain and behavior in the honey bee

Genome Res. 12 (4), 555-566 (2002)
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432 bp. mRNA linear EST 08-APR-2002
BB160003A20G01.5 Bee Brain Normalized Library, BB16 Apis mellifera
cDNA clone BB160003A20G01 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FORWARD: TAATACGACTCACTATAGGG
BACKWARD: ATTAACCCTCACTAAAG
Plate: BB160003A20 row: G column: |
Seq primer: AGCGGATAACAATTTCACACAGA
High quality sequence stop: 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            505 S. Goodwin Ave., Urbana, IL 61801, USA
Tel: 217 265 0309
Fax: 217 244 3499
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Department of Entomology
University of Illinois
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Apis mellifera
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Neoptera; Endopterygota; Hymenoptera; Apocrita; Aculeata; Apoidea;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Email: generobi@life.uiuc.edu
This research was funded by the University of Illinois Critical
Research Initiatives Fund and a Burroughs-Wellcome Trust Innovation
Award in Functional Genomics to G.E. Robinson and an NSF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11932240
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         a
/clone lib="Bee Brain Normalized Library, BB16"
/note="Organ: brain; Vector: pT773-Pac; Site 1: EccR1;
Site 2: Not1; The BB16 library was contributed by the
Soares laboratory and it was constructed and normalized
as described by Bonaldo, M.F., Lennon, G. and Soares,
M.B. (1996), Genome Research 6(9): 791-806. RNA was
prepared from dissected brains of adult worker bees of
various ages and various behavioral groups. "
a 69 c 102 g 98 t
                                                                                                                                                                                                                                                                                                                                                     /organism="Apis mellifera"
/mol type="mRNA"
/strain="mixed strains of European bees,
A.m. ligustica"
                                                                                                                                                                                                             /tissue_type="brain"
/dev_stage="adult worker honey bee"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                  /sex="female"
                                                                                                                                                                                                                                                                                         clone="BB160003A20G01"
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Query Match

71.4%;

Score 15;

DB 12;

Length 432;

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                                                                                                                                             15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Mahairas GG, Wallace JC, Hood L
High Throughput Sequencing Center
University of Washington
401 Queen Anne Avenue North, Seattle, WA 98109, USA
Tel: (206) 616-3618
Fax: (206) 616-3887
Email: jWallace@u.washington.edu
Clones are derived from the human BAC library RPCI-11. For BAC
library availability, please contact Pieter de Jong
(pieter@dejong.med.buffalo.edu). Clones may be purchased from
BACPAC Resources (http://bacpac.med.buffalo.edu/ordering_bac.htm)
or from Resear h Genetics (info@resgen.com). BAC end Web Server:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AQ623639 609 bp DNA linear GSS 16-JUN-1
HS_5377_A2_F05_SP6E RPCI-11 Human Male BAC Library Homo sapiens
genomic clone Plate=953 Col=10 Row=K, genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Seq primer: SP6
Class: BAC ends
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Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 609)
Mahairas,G.G., Wallace,J.C., Smith,K., Swartzell,S., Holzman,T.,
Mahairas,G.S., Shaker,R., Furlong,J., Young,J., Zhao,S., Adams,M.D. and
Tood T.A., Shaker,R., Furlong,J., Young,J., Zhao,S., Adams,M.D. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      http://www.htsc.washington.edu
Plate: 953 row: K column: 10
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Location/Qualifiers
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                                                                                                                                                                                                                            /clone_lib="RPCI-11 Human Male_BAC_Library"
/note="Vector: pBACe3.6; Site_1: EcoRI; Site_2: EcoRI;
Male_blood_DNA_was isolated from one randomly chosen do
and partially digested with a combination of EcoRI and
EcoRI Methylase. Size selected_DNA_was cloned into the
pBACe3.6 vector at EcoRI sites"
13 others
                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                           /sex≃"male"
                                                                                                                                                                                                                                                                                                                                                                           clone="Plate=953 Col=10 Row=K"
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EINCQ64TR EI_10_12 KB Entamoeba genomic survey sequence.
BZ391656
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15; Conserv
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Development of Genomic Resources for honey bee (Apis mellifera L.):

BAC Library Construction, Preliminary STC Analysis, and

Identification of Clones Associated With Behavioral Traits
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           728 bp DNA linear GSS 08-AM Ba0021J24f Apis mellifera Apis mellifera genomic clone AM Ba0021J24f, genomic survey sequence.
BH816458
Loftus, B., Wang, Z., Roncaglia, P., Van Aken, S. Gene discovery in the Entamoeba invadens genom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                High quality sequence start: 52 High quality sequence stop: 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: jtmkns@clemson.edu
Total hg bases = 231
Total primer: TAATACGACTCACTATAGGG
Seq primer: TAATACGACTCACTATAGGG
Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Apis mellifera
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta;
                                                                                         Entamoeba invadens
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Fax: 864 656 4293
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100 Jordan Hall, C
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                                                               Eukaryota; Entamoebidae; Entamoeba.
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/note="Vector: pCUGIBAC-1; Site_1: HindIII; Site_2: NotI;
For more details on library preparation and sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          http://www.genome.clemson.edu/projects/stc/bee/AM__Ba/ To
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Apis mellifera"
/mol_type="genomic DNA"
/strain="Africanized honey
/db_xref="taxon:7460"
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lab_host="E. coli"
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                       and Fraser, C.
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                                                                                                                                                                             Laboratory of Molecular Plant Biology Stazione Zoologica 'Anton Dohrn' Villa Comunale, I-80121, Napoli, Italy Tel: 39 081 583 3268/3211
Fax: 39 081 764 1355
                                                                                                                                                                                                                                                                                                             1 (bases 1 to 889)
Scala, S., Carels, N., Falciatore, A., Chiusano, M.L. and Bowler, C. Genome properties of the diatom Phaeodactylum tricornutum Physiol. 129 (3), 993-1002 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PTMM00709 Phaeodactylum tricornutum Uni-Zap XR Phaeodactylum tricornutum cDNA 5', mRNA sequence.
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15; Conser
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TIGR
9712 Medical Center Drive, Rockville, MD 20850,
                                                                                                                         Diatom EST Database(http://avesthagen.sznbowler.com)
Seq primer: T3 backward
                                                                                                                                                            Email: chris@alpha.szn.it
                                                                                                                                                                                                                                                                        Contact: Bowler C
                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; stramenopiles; Bacillariophyta; Bacillariophyceae; Bacillariophycidae; Naviculales; Phaeodactylaceae; Phaeodacty
                                                                                                                                                                                                                                                                                                                                                                                                                                 Phaeodactylum tricornutum
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Class: sheared
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tel: 301-838-3543
Fax: 301-838-0208
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Other_GSSs: EINCQ64TF
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Location/Qualifiers
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/Glone lib="KII 10 12 KB"
/note="Vector: pHOS2; Site_1: BstXI; Total genomic DNA was isolated from early log phase trophozoites of E. invadens IP-1 using a Qiagen plant DNA extraction kit. A shotpun medium-size plasmid library (average insert size of 10-12 kb) was generated by random mechanical shearing of E. invadens genomic DNA, repairing the ends of DNA fragments with T4 Polymerase, adding BstXI adaptors and ligating into the BstXI site of a pUC-derived vector pHOS2."

a 152 c 140 g 269 t
/organism="Phaeodactylum tricornutum"
/mol_type="mRNA"
/db xref="taxon:2850"
/ceTl_line="CCMP632"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Entamoeba invadens"
/mol_type="genomic DNA"
/strain="IP-1"
                                                                                     ocation/Qualifiers
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87;
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CC235774/c
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 CC235774 1220 bp CH261-139L19_RM1.2 CH261 Gallus
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                                                                                                                                                      σ
                                                                                                                                                                                            l Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cgi-bin/cluster.cgi?seq=CSOBAK038CA04NM2&cluster=10667.f. Contact Feng Liang Email: filang@lifetech.com URL: http://fulllength.invitrogen.com/ InVitroGen Corporation 1600 Faraday Avenue Genoscope sequence ID: CSOBAK038CA04NM2. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 10667.f For
more information about this cluster, see
http://www.genoscope.cns.fr/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Li,W.B., Gruber,C., Jessee,J. and Polayes,D. Full-length cDNA libraries and normalization Unpublished
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BP 191 91006 EVRY cedex - France
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CS0DF022YA13 3-PRIME, mRNA sequence.
                                                                                                                                            GAACGTTCGAGATGA 20
                                                                                                                  GAACGTTCGAGATGA 886
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                                                                                                                                                                                                                                                                                       304
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                                                                                                                                                                                                                                                                                 /note="Organ: brain; Vector: pCMVSPORT_6; 1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and ECORV sites of the pCMVSPORT 6 vector. Library was not normalized."

199 c 163 g 246 t 1 others
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/note="Vector: Uni-Zap XR vector; Site_1: Eco
                                                                                                                                                                                                                                                                                                                                                                                                   'Clone="CSODF022YA13"
'(issue type="FETAL BRAIN"
'dev stage="fetal"
'Clone_lib="Homo sapiens FETAL BRAIN"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'mol_type="mRNA"
'db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    organism="Homo sapiens"
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247 c
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Primates;
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ered. No. 88;
Mismatches 0;
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gallus
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e CH261-139L19,
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Kremitzki,C., Higginbotham,J., V
Warren,W., Graves,T., Mardis,E.
Gallus gallus BAC End Reads
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Genome Sequencing Center
Washington University School of Medicine
Email: submissions@watson.wustl.edu
Insert Length: 182000 Std Error: 0.00
Seq primer: RM1 TACGACTCACTATAGGGAGA
Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gallus gallus (chicken)
Gallus gallus
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                                                                                              Submitted (06-JAN-2003) Genoscope
BP 191 91006 EVRY cedex - FRANCE
                                                                                                                                                                                                                              Anopheles gambiae (African malaria mosquito)
Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
                                                                                                                                                                                                                                                                                                                                                                  CNS09N54 108 bp mRNA linear HTC 08-JAN-2003 Single read from an extremity of a full-length cDNA clone made from Anopheles gambiae total adult females. 5-PRIME end of clone FX0AAC5AH09 of strain 6-9 of Anopheles gambiae (African malaria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        High quality sequence start: 473 High quality sequence stop: 541.
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                                                                                                                                                                        Anopheles.
1 (bases 1 to 108)
                                                                                                                                                                                                                                                                                              HTC
                                                                                                                                                                                                                                                                                                                                                    mosquito).
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                                                                                                                                        Direct Submission
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                                                                              Web : www.genoscope.cns.fr)
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/clone lib="CH261"
/clone lib="CH261"
/note="Vector: pTARBAC2.1; Site_1: EcoRI; Site_2: EcoRI;
CH261 Female Chicken library - for library and clone
ordering information: http://www.chori.org/bacpac"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Gallus gallus"
/mol_type="genomic DNA"
/strain="Red Jungle Fowl"
/db_xref="taxon:9031"
/mol_type="mRNA"
                      /organism="Anopheles gambiae"
                                                          Location/Qualifiers
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100.0%; F1
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                                                                                                                                                                                                                  Diptera; Nematocera; Culicoidea;
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                                                                                              e - Centre National de Sequencage (E-mail : seqref@genoscope.cns.fi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          91;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 29; Length 1220;
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                                                                                                segref@genoscope.cns.fr
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                                                                                                                                                                                                                                                                                                                                                                                                           Email: mmarra@watson.wustl.edu
PCR_F: TGTAAAACGACGCCAGTGAGCAAGTTCAGCCTGG
PCR_B: CAGGAAAACGACGCCAGTGAGCAGGTATTTCTTCCAGGGTA
Source: Washington University Genome Sequencing Center
PCR amplified DNA is available from Washington University Genome
PCR amplified DNA is available from Washington University Genome
Sequencing Center. Aliquots of the library may be requested from
Kuwabara (pek@mrc-lnb.cam.ac.uk).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 168)
Hilliar, Chiapelli, B., Chissoe, S., Clark, N., Couch, J., Dubuque
,T., Hawkins, M., Holman, M., Hultman, M., Kucaba, T., Kuwabara, P., Le
,T., Mardis, E., Marra, M., Parsons, J., Rifkin, L., Rohlfing, T., Tan
,M., Mardis, E., Waterston, R., Wohldmann, P. and Wilson, R.,
,F., Trevaskis, E., Waterston, R., Wohldmann, P. and Wilson, R.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tel: 314 286 1455
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Washington University Genome Sequencing Center
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Washington University Caenorhabditis briggsae EST project Unpublished
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Caenorhabditis briggsae
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/db_xref="kaxon:7165"
/clone="rkohAC5aH09"
/plasmid="pME18S-FL"
/note="end : 5-pRIME"
a 31 c 34 g
                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                             /organism="Caenorhabditis briggsae"
/mol_type="mRNA"
/strain="G16 Gujarat"
/strain="G16 Gujarat"
                                                                                                                                                                                                                                                                                _xref="taxon:6238"
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66.7%; Score 14; DB 14; 100.0%; Pred. No. 2.8e+02;
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                                                                                                                                                                                                               CNS09Q90 348 bp mRNA linear HTC 08-JAN-2003 Single read from an extremity of a full-length cDNA clone made from Anopheles gambiae total adult females. 5-PRIME end of clone FK0AAC7AB01 of strain 6-9 of Anopheles gambiae (African malaria
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Molecular Biology Unit
International Livestock Research
P.O. Box 30709, Nairobi, Kenya
Tel: 254-2 630743
Fax: 254-2 631499
                                                                                                                                                                                 mosquito).
BX070096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 (bases 1 to 298)
Djikeng,A., Donelson,J.E. and Majiwa,P.A.O.
Generation of expressed sequence tags as physical landmarks in the
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AA186214.1 GI:1772670
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                                                                   Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
                                                                                                     Anopheles gambiae (African malaria mosquito)
Anopheles gambiae
                                                                                                                                                              BX070096.1 GI:27643377
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished
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imer: T3 primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note=Tvector: Lambda ZAP II (Stratagene); Site 1: EcoxI; Site 2: XhoI; The mRNA was purified from a cloned population of bloodstream trypanosomes reexpressing the MVAT4 metacyclic variant surface glycoprotein (VSG). A unidirectional oligo dT-primed EcoRI/XhoI cDNA library was constructed in lambda ZAP II (Stratagene)."
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/mol_type="mRNA"
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/clone_lib="MVAT4 bloodstream form of serodeme WRATatl.1"
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100.0%;
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Pred. No. 3e+02;
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                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Gene B. Robinson
Department of Entomology
University of Illinois
505 S. Goodwin Ave., Urbana, IL
Tel: 217 265 0309
Fax: 217 244 3499
Email: generobi@life.uiuc.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              263
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Whitfield, C.W., Band, M.R., Bonaldo, M.F., Kumar, C.G., Liu, L.,
Wardinas, J., Robertson, H.M., Soares, B. and Robinson, G.E.
Annotated expressed sequence tags and cDNA microarrays for studies
of brain and behavior in the honey bee
Genome Res. 12 (4), 555-566 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BI507844 387 bp mRNA linear EST 08-APR-2002
BB170008B10E04.5 Bee Brain Normalized/Subtracted Library, BB17 Apis
mellifera cDNA clone BB170008B10E04 5', mRNA sequence.
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                                                                                                                                                                                                                                          Plate: BB170008B10 row: E column: Seq primer: AGCGGATAACAATTTCACACAGGA
                                                                                                                                                                                                                                                                                                                                                 This research was funded by the University of Illinois Critical Research Initiatives Fund and a Burroughs-Wellcome Trust Innovation Award in Functional Genomics to G.E. Robinson and an NSF Postdoctoral Fellowship in Bioinformatics to C.W. Whitfield.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Apis mellifera (honeybee)
Apis mellifera
                                                                                                                                                                                                     High quality sequence stop: 387.
Location/Qualifiers
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                                                                                                                                                                                                                                                                                    FORWARD: TAATACGACTCACTATAGGG
BACKWARD: ATTAACCCTCACTAAAG
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Neoptera; Endopterygota; Hymenoptera; Apocrita; Aculeata; Apoidea;
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Location/Qualifiers
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/clone="FKOAAC7ABO1"
/plasmid="pME18S-FL"
/note="end : 5-pRIME"
a 101 c 114 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Anopheles gambiae"
/mol_type="mRNA"
/strain="6-9"
                                                                                                  /organism="Apis mellifera"
/mol_type="mRNA"
/strain="mixed strains of European bees,
/.m. ligustica"
tissue_type="brain"
dev_stage="adult worker honey bee"
                                                              'db_xref="taxon:7460"
'clone="BB170008B10E04"
                                            sex="female"
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Pred. No.
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3e+02;
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Best Local (
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                                                                                                                                                                                                                                    source
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Apis mellifera
Apis mellifera
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Eukaryota; Metazoa; Arthropoda; Hymenoptera; Apocrita; Aculeata; Apo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Annotated expressed sequence tags and cDNA microarrays for studies of brain and behavior in the honey bee Genome Res. 12 (4), 555-566 (2000)
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414 bp mRNA linear EST 08-APR-2002
BB170012B20C02.5 Bee Brain Normalized/Subtracted Library, BB17 Apis
mellifera cDNA clone BB170012B20C02 5', mRNA sequence.
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BACKWARD: ATTAACCCTCACTAAAG
Plate: BB170012B20 row: C column: 02
Seq primer: AGCGGATAACAATTTCACACAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                              This research was funded by the University of Illinois Critical Research Initiatives Fund and a Burroughs-Wellcome Trust Innovation Award in Functional Genomics to G.E. Robinson and an NSF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Department of Entomology University of Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Gene E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 414)
Whitfield, C.W., Band, M.R., Bo
Pardinas, J., Robertson, H.M.,
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                                                                                                                                                                                                                                                                                                                                                                                                                      Postdoctoral Fellowship in Bioinformatics to C.W. Whitfield.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: generobi@life.uiuc.edu
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217 265 0309
217 244 3499
                                                                                                                                                                                                                                                       quality sequence stop: 414.
Location/Qualifiers
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/note="Organ: brain; Vector: pT7T3-Pac; Site_1: EcoR1;
Site_2: Not1; This BB17 cDNA library was generated by
subtraction of the BB16 library with 4000 previously
sequenced clones. The BB16 library was contributed by the
Soares laboratory and it was constructed and normalized
as described by Bonaldo, M.F., Lennon, G. and Soares,
M.B. (1996), Genome Research 6(9): 791-806. RNA was
prepared from dissected brains of adult worker bees of
various ages and various behavioral groups. "
25 a 71 c 95 g 96 t
                                                                                                                                 /mol_type="mRNA"
/strain="mixed strains of European bees, predominantly
/.m. ligustica"
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'tissue_type="brain"
'dev_stage="adult worker honey bee"
'lab_host="DH10B"
                                                                     sex="female"
                                                                                             clone="BB170012B20C02"
                                                                                                                                                                                                            organism="Apis mellifera"
                                                                                                                 _xref="taxon:7460"
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100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: toxo@watson.wustl.edu
Contact David Sibley (toxoest@borcim.wustl.edu) for further
information relating to organism, libraries, or clone availability.
Seq primer: -40RP from Gibco.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tang, K., Cole, R., Fogarty, S., Sibley, L.D., Ajioka, J.A., White, M., Clifton, S., Pape, D., Martin, J., Wylie, T., Dante, M., Marra, M., Hillier, L., Kucaba, T., Theising, B., Bowers, Y., Gibbons, M., Ritter, E., Bennett, J., Franklin, C., Tasgareishvili, R., Ronko, I., Kennedy, S., Maguire, L., Waterston, R. and Wilson, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CB333691 424 bp mRNA linear E
TgESTzyf67b10.y1 TgME49 B7 Tachyzoite cDNA Library 2
gondii cDNA clone TgESTzyf67b10.y1 5', mRNA sequence.
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Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sarcocystidae; Toxoplasma.
1 (bases 1 to 424)
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Eukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida;
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Fax: 314 286 1810
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/dev_stage="Tachyzoite"
//lab_host="E_Coli XL10"
//lab_host="E_Coli XL10"
//clone lib="TgMEA9 B7 Tachyzoite cDNA Library 2"
//clone lib="TgMEA9 B7 Tachyzoite cDNA Library 2"
//note="Vector: pBluescript II SK+; Site 1: XhoI; Site_2:
ECORI; The CDNA library was constructed by Keliang Tang,
and Robert Cole at Washington University. cDNA was
synthesized from poly mRNA using an oligo-dT primer
containing a XhoI site. Following second strand synthesis,
ECORI adapters were ligated to the CDNA, and products were
size-selected on sephacryl S500. The CDNA were
directionally cloned into the ECORI/XhoI prepared
pBluescript II SK+ vector, and transformed into XLIO cells
(Stratagene). The library may contain a small percentage
of host or bacterial contaminants."
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/note="Organ: brain; Vector: pT773-Pac; Site_1: EcoR1;
Site_2: Not1; This BB17 cDNA library was generated by
subtraction of the BB16 library with 4000 previously
sequenced clones. The BB16 library was contributed by the
Soares laboratory and it was constructed and normalized
as described by Bonaldo, M.F., Lennon, G. and Soares,
M.B. (1996), Genome Research 6(9): 791-806. RNA was
prepared from dissected brains of adult worker bees of
various ages and various behavioral groups. "
a 100 c 104 g 110 t 1 others
                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Toxoplasma gondii"
/mol_type="mRNA"
/db_xref="taxon:5811"
/clone="TgESTzyf67b10.y1"
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Pred. No. 3.1e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Box 8501, St. Louis, MO 63108, USA
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VERSION
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AUTHORS
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BM629296/c
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Anopheles gambiae
Eukaryota, Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     45 w. Gude Dr., Rockville,
Tel: 2404533151
Fax: 2404534580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. (bases 1 to 433)
Holt,R.A., Lin,J.-J., Murphy,S.D., Evans,C.A., R., Collins,F.H., Venter,J.C. and Hoffman,S.L. Celera Anopheles gambiae EST project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HM629296 433 bp mRNA
17000667499932 A.Gam.ad.cDNA1 Anopheles
19600449650107 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: HoltRA@celera.com Plate: NU01004AZR row: K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Celera Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Holt R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished
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                                                                                                                                                                                                            Conservative
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                                                                                                                                                                                                                                                                                /note=Tvector: pSport1; Site 1: Sal1; Site 2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."

109 c 137 g 76 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chromosome) "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Anopheles gambiae"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       j. .433
                                                                                                                                                                                                                                                                                                                                                                                                /clone_lib="A.Gam.ad.cDNA1"
                                                                                                                                                                                                                                                                                                                                                                                                              /dev_stage="Adult"
/lab_host="DH10b"
                                                                                                                                                                                                                                                                                                                                                                                                                                             clone="19600449650107"
                                                                                                                                                                                                                                                                                                                                                                                                                                                               db_xref="taxon:7165"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            strain="RSP-ST (Reduced susc. to Permethrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ocation/Qualifiers
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100.0%;
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. 3.1e+02;
ches 0;
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3.1e+02;
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gambiae cDNA
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A clone
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                                                                                                                                                                                                                                                                                                                                                                                                                              113
Bode,H., Blumberg,B., Steele,R., Wigge,P., Gee,L., Nguyen,Q.,
Martinez,D., Kibler,D., Hampson,S., Clifton,S., Pape,D., Marra,M.,
Hillier,L., Martin,J., Wylle,T., Dante,M., Theising,B., Bowers,Y.,
Gibbons,M., Ritter,B., Bennett,J., Ronko,I., Tasgareishvili,R.,
Magnire,L., Kennedy,S., Waterston,R. and Wilson,R.
Washi Hydra EST Project
Unpublished
Other_ESTs: taa13b12.y1
Contact: Hans Bode
Washi Hydra EST Project
Washington University School of Medicine
Washington University School of Medicine
Washington University School of Medicine
                                                                                                                                                                                                                                                                                                                                 CA302582 466 by taa13b12.x1 Hydra cDNA library
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1 (bases 1 to 439)

Mahairas,G.G., Wallace,J.C., Smith,K., Swartzell,S., Holzman,T., Mahairas,G.G., Wallace,J.C., Young,J., Zhao,S., Adams,M.D. a:
                                                                                                                                                                                                                                   Hydra magnipapillata
Hydra magnipapillata
                                                                                                                                                                                                                                                                       EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: jwallace@u.washington.edu
Sequence Tagged Connector
Plate: 2362 row: O column: 12
Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Mahairas GG, Wallace JC,
High Throughput Sequencing Center
University of Washington
401 Queen Anne Avenue North, Seatt
                                                                                                                                                                                                                     Eukaryota; Metazoa; Cnidaria;
                                                                                                                                                                                                                                                                                       CA302582.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          High quality sequence stop: 439
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tel: (206) 616-3618
Fax: (206) 616-3887
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GSS.
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Natl. Acad. Sci. U.S.A. 96 (17), 9739-9744 (1999)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'sex="male"
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                                                                                                                                                                                                                                                                                       GI:24465641
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100.0%; Pr
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Pred. No. 3.1e+02;
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                                                                                                                                                                                                                                                                                                                                        Submitted
BP 191 910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Single read from an extremity of a full-length cDNA clone made from Anopheles gambiae total adult females. 5-PRIME end of clone FKOAAC37DA02 of strain 6-9 of Anopheles gambiae (African malaria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       by: Washington University Genome Sequencing Cen
on obtaining a clone please contact: Hans Bode
Seq primer: Primer name ambiguous
High quality sequence stop: 426.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: est@watson.wustl.edu
Email: est@watson.wustl.edu
Library was constructed by H. Bode and B. Blumberg DNA sequencing
Library was constructed by H. Bode and B. Blumberg DNA sequencing
Library was constructed by H. Bode and B. Blumberg DNA sequencing
Library was constructed by H. Bode and B. Blumberg DNA sequencing
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
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/lab host="PH5alpha"
/clone lib="Hydra cDNA library"
/note="Vector: pspoRT6; Site_1: Not1; Site_2: Sal1;
/note="Vector: pspoRT6; Site_1: Not1; Site_2: Sal1;
/ibraries prepared by Phil Wigge, Plant Molecular and Cellular Biology, Lab (Detlev Weigel), The Salk Institute for Biological Science, 10010 North Torrey Pines Road, La Jolla, CA 92037."
                                                                                                                           /plasmid="pME18S-FL"
/note="end: 5-PRIME"
126 c 157 g
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/clone="FK0AAC37DA02"
                                                                                                                                                                                                                           /organism="Anopheles
/mol_type="mRNA"
/strain="6-9"
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006 EVRY cedex - FRANCE
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(E-mail : seqref@genoscope.cns.fr
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                                     Anopheles gambiae (African malaria mosquito)
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WashU-HHMI Mouse EST Project
Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Lo
Tel: 314 286 1800
Fax: 314 286 1810
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Marra, M., Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubu, Marra, M., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Theising, B., Wylle, T., Lennon, G., Soares, B., Wilson, R. and
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High quality sequence stop: 7.
Location/Qualifiers
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This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
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Endopterygota; Diptera; Nematocera;
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                                                                                                        Celera Genomics
45 w. Gude Dr., Rockville, MD 20850, USA
Tel: 2404533151
Fax: 2404534580
Email: HoltRA@celera.com
                                                                                                                                                                                                                          1 (bases 1 to 492)
1 (bases 1 to 492)
Holt,R.A., Lin,J.-J., Murphy,S.D., Evans,C.A.,
R., Collins,F.H., Venter,J.C. and Hoffman,S.L.
Celera Anopheles gambiae EST project
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Tel: 2404533151
Fax: 2404534580
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Celera Anopheles gambiae EST project
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                                                                      Plate: NU01004ABV row: K column: Seq primer: M13 Reverse
                                                                                                                                                                                                   Contact: Holt R.A.
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/note="Vector: pSport1; Site_1: Sall; Site_2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
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/clone="19600449644818"
/dev_stage="Adult"
/organism="Anopheles gambiae"
/mol_type="mRNA"
                                                      Location/Qualifiers
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/mol_type="mRNA"
/strain="RSP-ST (Reduced susc.
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Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
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17000687313490 A.Gam.ad.cDNA1 Anopheles gambiae cDNA clone
19600449671469 5', mRNA sequence.
BM644091
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unpublished Contact: Holt R.A.
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Fax: 2404534580
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45 w. Gude Dr., Rockville,
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Conservative 0; Mismatches
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                                                                /clone_lib="A.Gam.ad.cDNA1"
/note="Vector: pSport1; Site_1: Sal1; Site_2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
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/note="Vector: pSport1; Site_1: Sal1; Site_2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
                                                                                                                                                                                                                                                                                       /organism="Anopheles gambiae"
/mol_type="mRNA"
/strain="RSP-ST (Reduced susc.
chromosome)"
                                                                                                                                                                                                                   dev_stage="Adult"
lab_host="DH10b"
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clone="19600449671469"
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lab_host="DH10b"
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66.7%;
100.0%;
Score 14;
Pred. No.
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DB 12; 1
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BM611518/c
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Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Eukaryota; Metazoa; Arthropoda; Nematocera; Culicoidea;
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45 w. Gude Dr., Rockville,
Tel: 2404533151
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Anopheles gambiae
Eukaryota; Metazoa;
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BM611518.1 GI:18909622
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19600449722493
                                                                                                                                                                                         BM611518
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19600449683979 5', mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Anopheles gambiae (African malaria mosquito)
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                                           Anopheles gambiae (African malaria mosquito)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone_lib="A.Gam.ad.cDNA.blood1"
/note="Vector: pSport1; Site 1: Sal1; Site 2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen 24 hours after human blood feeding. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)"
a 131 c 159 g 88 t
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/dev_stage="Adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Anopheles gambiae"
/mol_type="mRNA"
/strain="RSP-ST (Reduced susc
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100.0%; Pr
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A.Gam.ad.cDNA.blood1 Anopheles
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Arthropoda; Hexapoda; Insecta; Pterygota;
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1 (bases 1 to 504)

1 (bases 1 to 504)

Holt,R.A., Lin,J.-J., Murphy,S.D., Ev., R., Collins,F.H., Venter,J.C. and Hc.,R., lins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.H., Venter,J.C. and Hc., Collins,F.
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Ebbole, D.J., Yuan, J., Thomas, T.L.,
K. and Dean, R.A.
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Chromatogram file of this sequence is available, see contact person; Best nr hit (April. 22, 2003) gb|EAA28529.1| hypothetical protein [Neurospora crassa] 107 9e-49
                                                                                     Peterson Bldg, MS2132, College
Tel: 979 845 4831
Fax: 979 845 6483
                                                                                                                                                              Department of Plant Pathology & Microbiology
Texas A&M University
                                                                                                                                                                                                             On Mar 7, 2002 this
Contact: Ebbole DJ
                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes; Sordariomycetes incertae sedis; Magnaporthaceae; Magnaporthe.
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                                                                      Email: d-ebbole@tamu.edu
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/strain="RSP-ST (
chromosome)"
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/note="Vector: pSport1; Site 1: Sal1; Site 2: Not1; Wholl adult mosquitoes (mixed sex) frozen on liquid nitrogen 2: hours after human blood feeding. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)" a 132 c 161 g 88 t
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/dev_stage="Adult"
/lab_host="DH10b"
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Hoffman, S.L
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Library
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Gaps

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06-MAY-2003 Magnaporthe

Not1; Whole nitrogen 24

Lu,G., Bhatterai Magnaporthe

USA

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REFERENCE
AUTHORS
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Best Local Similarity
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FORWARD: T3 primer
BACKWARD: T7 primer
Plate: mgcs005 row:
Seq primer: T3.
                                                                                                                                                                                                                                                                                                                                                                                        Unphuzian...

Contact: Ruan Y

Caboratory of Molecular Biotechnology

Genome Institute of Singapore

Genome Institute of Singapore

Genome Park Road, The Capricorn #05-01, Singapore 117528
                                                                                                                                                                                                                                                                   Tel: +65 6827 5200
Fax: +65 6827 5201
Email: gisry@nus.edu.sg
GIS Clone ID: ZF001-P00024-PP_M23
PCR PRimers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CB358730 S13 bp mRNA linear EST 17-MAR-20
ZF001-P00024-DPE-F-A G12 GISZF001 Danio rerio cDNA clone
IMAGE:6900672 5' similar to fc24912.y1 Zebrafish WashU MPIMG EST
Danio rerio cDNA clone IMAGE:3722374 5', mRNA sequence.
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                                                                                                   Plate: ZF001-P00024-DPE-F-A
Seq primer: CCGCATAACTTGTATAGCA
High quality sequence stop: 513
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Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes
; Cyprinidae; Danio.
                                                                                                                                                                                                          FORWARD: M13
BACKWARD: M13
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Genome Institute of Singapore,
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/mol_type="mRNA"
/strain="Guy11"
/organism="Danio rerio"
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Singapore, Zebrafish E
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Derelle, E., Ferraz, C., Lagoda, P., Eychenie, S., Cooke, R., Fsabau, X., Courties, C., Delseny, M., Demaille, J., Picard, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ots00392 Ostreococcus tauri genomic shotgun library Ostreococcus tauri genomic clone ota23a09.b 5', genomic survey sequence.
                                                                                                                                                                                                                                                                                                    BP 44, Avenue Fontaule,
Tel: (33)468887309
Fax: (33)468887398
                                                                                                                                                                                                                                                                                                                                                                                                                                            cell
J. Phycol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA libraries for sequencing the genome of Ostreococcus tauri (Chlorophytae, Prasinophyceae): the smallest free-living eukaryotic
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                                                                                                                                                                                                                                                                                 Email: h.moreau@obs-banyuls.fr
                                                                                                                                                                                                                                                                                                                                                                            CNRS UMR 7628
                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Moreau
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/db_xref="taxon:70448"
/clome="cta23a09.b"
/clome=10ta23a09.b"
/clone_lib="Ostreococcus tauri genomic shotgun library"
/note="Vector: Bluescript; Site_1: EcoRV; Site_2: EcoRV;
Shotgun library prepared after Sonication of the genomic
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/note="Vector: pDNR-LIB; Site 1: Sfi A (GGCCATTACGGCC);
Site_2: Sfi B (GGCCGCCTCGGCC); Priming method: Sfi-(dT)30
Primed; Priming sequence: 5.ATTCTAGA GGCCGAGGCGGCC
GACATG(T)30VN; Directionally cloned, 5' cloning site
Sfi A site GGCCATTACGGCC; 5' linker/adaptor sequence
                                                                                                                organism="Ostreococcus tauri"
|mol_type="genomic DNA"
|strain="OTTH0595"
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site GGCCGCCTCGGCC; 3' lin
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/dev stage="7 Different embryonic Stages( From just
fertilized Embryos to 72 hours just hatched baby fish)"
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Pred. No. 3.2e+02;
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RESULT 32
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AUTHORS
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19600449662307 5', mRNA
BM618536
BM618536.1 GI:18916954
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Celera Genomics
45 w. Gude Dr., Rockville,
Tel: 2404533151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Holt,R.A., Lin,J.-J., Murphy,S.D., Evans,C.A., R., Collins,F.H., Venter,J.C. and Hoffman,S.L. Celera Anopheles gambiae EST project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Anopheles gambiae (African malaria mosquito)
Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14;
 BM618261
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                                                                                                                                                                                                                                                                                                                                                                                                                 Plate: NU01004185 row: G
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                                                              CGAACGTTCGAGAT 437
                                                                                      CGAACGTTCGAGAT 18
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    Location/Qualifiers
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L: HoltRA@celera.com
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146 c 214 g 77 t
                                                                                                                                                                        /clone_lib="A.Gam.ad.cDNA1"
/note="Vector: pSport1; Site_1: Sal1; Site_2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."

138 c 174 g 90 t
                                                                                                                                                                                                                                                                                                                                        /mol_type="mRNA"
/strain="RSP-ST (Reduced
                                                                                                                                                                                                                                                                                        /dev_stage="Adult"
                                                                                                                                                                                                                                                                                                     /db_xref="taxon:7165"
/clone="19600449662307"
                                                                                                                                                                                                                                                                                                                                                                organism="Anopheles gambiae"
                                                                                                                                                                                                                                                                                                                              romosome)"
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100.0%;
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100.0%
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3.2e+02;
hes 0;
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Culicoidea;
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Best Local S
Matches 14
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Contact: Holt R.A.
Celera Genomics
45 w. Gude Dr., Ro
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DEFINITION
                       Anopheles.

1 (bases 1 to 528)

1 (bases 1 to 528)

Holt,R.A., Lin,J.-J., Murphy,S.D.,

,R., Collins,F.H., Venter,J.C. and
                                                                                                       Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
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Holt,R.A., Lin,J.-J., Murphy,S.D.,
,R., Collins,F.H., Venter,J.C. and
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19600449620529
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Plate: NU01004NAK row: J
Seq primer: M13 Reverse.
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Tel: 2404533151
Fax: 2404534580
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19600449666961
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Celera Anopheles gambiae EST
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone lib="A.Gam.ad.cDNA1"
/note="Vector: psport!; Site 1: Sall; Site 2: Not!; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. adult mosquitoes (mixed sex) frozen on liquid nitrogen. CDNA inserts >500 bp cloned directionally into psport 1. Not 1 site is 3'. Clones available through the Malaria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Anopheles gambiae"
/mol type="mRNA"
/strain="RSP-ST (Reduced susc.
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141 c 168 g 92 t
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lab_host="DH10b"
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1 5', mRNA
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Pred. No.
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.cDNA1 Anopheles
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                         Evans, C.A.,
Hoffman, S.L.
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Hoffman, S.L.
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                                               Kraft, C.L., Charlab
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Rockville,

MD 20850,

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REFERENCE
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Email: HoltRA@celera.com
Plate: NUO11004HMK row: I
Seq primer: M13 Reverse.
Seq primer: M13 Reverse.
                                                                                                                                                     Constructed at the Institute for Genomic Research (TIGR), Rockville, MD. Genomic DNA isolated from a Cloned population of Trypanosoma brucei (TREU927/4 GUTat 10.1) was mechanically shear to give a tight size distribution (4 kb). The v + i method used for the library construction is described in detail in Smith, H. and Venter, J.C. (Making small insert libraries for whole genome shotgun sequencing projects. Genome Sequencing: A Practical Approach, eds. M. Vaudin and B. Barrell, Oxford University Press, 1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ហ
                                                                  Email: nelsayed@tigr.org
Details of T. brucei sequencing at the Sanger Centre
at http://www.sanger.ac.uk/Projects/T_brucei/.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                     Direct Submission
Submitted (10-DEC-2000) Trypanosoma brucei genome sequencing project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton, Cambridge CB10 1SA, E-mail: barrell@sanger.ac.uk and
                                                                                                                                                                                                                                                                                                                                                                                                                                            Hall,N., Bowman,S., Lennard,N.J., Doggett,J., Atkin,R., Chillingworth,C., Ormond,D., Harris,B., El-Sayed,N., Howelville,S.E., Rajandream,M.A. and Barrell,B.G.
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genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                nhl@sanger.ac.uk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae;
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/note="Vector: pSport1; Site 1: Sal1; Site 2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
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/dev_stage="Adult"
/lab_host="DH10b"
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                                  organism="Trypanosoma brucei"
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/strain="RSP-ST (Reduced susc.
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/strain="TREU927"
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              type="genomic DNA".
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RESULT 36
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                                                                                                                                                                                                        Best Local Similarity
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AQ407920 534 bp DNA linear GSS 17-MAR-
HS_5055_B2_E08_T7A RPCI-11 Human Male BAC Library Homo sapiens
genomic clone Plate=631 Col=16 Row=J, genomic survey sequence.
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HOlt,R.A., Lin,J.-J., Murphy,S.D., Evans,C.A.,R., Collins,F.H., Venter,J.C. and Hoffman,S.L.Celera Anopheles gambiae EST project
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Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: HoltRA@celera.com Plate: NU01004N8E row: O Seq primer: M13 Reverse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Celera Genomics
45 w. Gudea Dr., Rockville, MD 20850, USA
Tel: 2404533151
Fax: 2404534580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished
Contact: Holt R.A.
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19600449617956
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                                                                                                                                                                                                                                                                       /clone_lib="A.Gam.ad.cDNA1"
/note="Vector: pSport1; Site 1: Sal1; Site 2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen.cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Anopheles gambiae"
/mol type="mANA"
/strain="RSP-ST (Reduced susc.
chromosome)"
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/dev_stage="Adult"
/lab_host="DH10b"
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                                                                                                                                                                                       66.7%; Score 14; DB 12; 1 100.0%; Pred. No. 3.2e+02; ive 0; Mismatches 0;
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Plate: 631 row: J column: 16
Seq primer: T7
Class: BAC ends
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                                                                                                                                                    Anopheles gambiae
Anopheles gambiae
                                                                                                                                                                                                                                                     sequence.
AL695492
AL695492.1 GI:19615134
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1 (bases 1 to 534)
Mahairas, G.G., Wallace, J.C., Smith, K., Swartzell, S., Holzman, T.,
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AQ407920.1
Christophides, G.K.,
                                                                                             Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
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Keller,A., Shaker,R.,
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                                                                       Anopheles.
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                                      (bases 1 to 541)
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Location/Qualifiers
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a 71 c 149 g 135.t 6 others
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                                                                                                                                                                                           gambiae (African malaria mosquito)
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/sex="male"
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/db_xref="taxon:9606"
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      Zdobnov, E.M., Carmouche, R., Benes, V.
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3.2e+02;
thes 0;
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This research was funded by the University of Illinois Critical Research Initiatives Fund and a Burroughs-Wellcome Trust Innovation Award in Functional Genomics to G.E. Robinson and an NSF Postdoctoral Fellowship in Bioinformatics to C.W. Whitfield. PCR PRimers
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 544)
Whitfield, C.W., Band, M.R., Bonaldo, M.F., Kumar, C.G., Liu, L.,
Pardinas, J., Robertson, H.M., Soares, B. and Robinson, G.B.
Annotated expressed sequence tags and cDNA microarrays for studies
of brain and behavior in the honey bee
Genome Res. 12 (4), 555-566 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BI511012 544 bp mRNA linear BB160004A20E05.5 Bee Brain Normalized Library, BB16 cDNA clone BB160004A20E05 5', mRNA sequence.
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European Molecular Biology Laboratory
Meyerhofstrasse 1, 69117 Heidelberg,
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Unpublished
Contact: Christophides GK
                                                                                                                                                                                            505 S. Goodwin Ave., Urbana,
Tel: 217 265 0309
Fax: 217 244 3499
                                                                                                                                                                                                                                                                                            Contact: Gene E. Robinson
Department of Entomology
University of Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Apis mellifera (honeybee)
Apis mellifera
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Location/Qualifiers
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Anopheles gambia
                                                                                                                                                                 Email: generobi@life.uiuc.edu
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Neoptera; Endopterygota; Hymenoptera; Apocrita; Aculeata; Apo
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ilarity 100.0%;
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/clone lib="NAP1"
/clone Processes (Pharmacia); Site_1: NotI;
/clone Processes (Processes (Pharmacia); Site_1: NotI;
/clone Processes (Processes (Pro
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|mol_type="mRNA"
|db_xref="taxon:7165"
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1 (bases 1 to 546)

Holt,R.A., Lin,J.-J., Murphy,S.D., Evans,C.A., Kraft,C.L., Charlab,R., Collins,F.H., Venter,J.C. and Hoffman,S.L.
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Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Eukaryota; Metazoa; Arthropoda; Nematocera; Culicoidea;
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17000687369108 A.Gam.ad.cDNA1 Anopheles gambiae cDNA
19600449617798 5', mRNA sequence.
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Seq primer: AGCGGATAACAATTTCACACAGGA
                                                                                                                                                                                                  Fax: 2404534580
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                                                                                                                                                                                                                                                  Celera Genomics
                                                                                                                                                                                                                                                                     Contact: Holt R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Anopheles gambiae (African malaria mosquito)
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                                                                                                                                                                                                                 w. Gude Dr., Rockville,
l: 2404533151
                                                                                                                                        il: HoltRA@celera.com
te: NU01004N8E row: H
primer: M13 Reverse.
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/note="Organ: brain; Vector: pT773-Pac; Site_1: EcoR1;
Site_2: Not1; The BB16 library was contributed by the Soares laboratory and it was constructed and normalized as described by Bonaldo, M.F., Lennon, G. and Soares, M.B. (1996), Genome Research 6(9): 791-806. RNA was prepared from dissected brains of adult worker bees of various ages and various behavioral groups. "
                                                  /organism="Anopheles gambiae"
/mol_type="mRNA"
/strain="RSP-ST (Reduced susc
                                                                                                                         ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"
/strain="mixed strains of European bees, predominantly
.m. ligustica"
clone="19600449617798"
                    db xref="taxon:7165"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              'tissue_type="brain"
'dev_stage="adult worker honey bee"
'lab_host="DH10B"
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                                                                                                                                                            column:
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3.2e+02;
hes 0;
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BM650226/c
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JOURNAL
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             549 bp mRNA
17000687370552 A.Gam.ad.cDNA1 Anopheles
19600449640068 5', mRNA sequence.
BM650226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                45 w. Gude Dr.,
Tel: 2404533151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Anopheles gambiae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Celera Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Holt R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Celera Anopheles gambiae EST project
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Anopheles gambiae (African malaria mosquito)
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                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                 Plate: NU01004AY4 row:
Seq primer: M13 Reverse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: HoltRA@celera.com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fax: 2404534580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
CGAACGTTCGAGAT 273
                             CGAACGITCGAGAT 18
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ilarity 100.0%;
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                                                                                                                                     /clone lib="A.Gam.ad.cDNA1"
/note="Vector: pSport1; Site 1: Sal1; Site 2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone_lib="A.Gam.ad.cDNA1"
/note="Vector: pSport1; Site 1: Sal1; Site 2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1.
Not 1 site is 3'. Clones available through the Malaria
                                                                                                                                                                                                                                                                                                                                 /mol_type="mRNA"
/strain="RSP-ST (Reduced susc.
chromosome)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
                                                                                                                                                                                                                                                                     /clone="19600449640068"
/dev_stage="Adult"
/lab_host="DH10b"
                                                                                                                                                                                                                                                                                                                                                                                 organism="Anopheles gambiae"
                                                                                                                                                                                                                                                                                                                                                                                                                ocation/Qualifiers
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                                                                                                                                                                                                                                                                                                                       xref="taxon:7165"
                                                                            66.7%;
100.0%;
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                                                                            Score 14; DB 12;
Pred. No. 3.2e+02;
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                                                           Mismatches
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3.2e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hoffman, S.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Evans, C.A.,
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                                                                                         Length 549;
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AUTHORS
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BM626834/c
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BM633500/c
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JOURNAL
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Best Local
                                                   AUTHORS
                                                                                                                               ORGANISM
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                                                                                                                                                                                                                                                                                                                     302
Anopheles.

1 (bases 1 to 554)

Holt,R.A., Lin,J.-J., Murphy,S.D., Evans,C.A., Kraft,C.L., R., Collins,F.H., Venter,J.C. and Hoffman,S.L.

Celera Anopheles gambiae EST project
                                                                                                                                                                                                    BM633500 554 bp mRNA
17000687507362 A.Gam.ad.cDNA1 Anopheles
1900449648215 5', mRNA sequence.
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17000687496213 A.Gam.ad.cDNA1
19600449642604 5', mRNA sequer
                                                                                          Anopheles gambiae (African malaria mosquito)
Anopheles gambiae
Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Eukaryota; Metazoa; Arthropoda; Nematocera; Culicoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: HoltRA@celera.com Plate: NU01003CY3 row: B Seq primer: M13 Reverse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   45 w. Gude Dr., Rockville, Tel: 2404533151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Holt,R.A., Lin,J.-J., Murphy,S.D., Evans,C.A., ,R., Collins,F.H., Venter,J.C. and Hoffman,S.L. Celexa Anopheles gambiae EST project
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BM626834.1 GI:18926345
                                                                                                                                                                            BM633500.1
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                                                                                                                                                                                          BM633500
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Celera Genomics
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone_lib="A.Gam.ad.cDNA1"
/note="Vector: pSport1; Site 1: Sal1; Site 2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."

[WWW.malaria.mr4.org)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Anopheles gambiae"
/mol_type="mRNA"
/strain="RSP-ST (Reduced susc
chromosome)"
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'dev_stage="Adult"
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Pred. No.
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, 3.2e+02;
thes 0;
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gambiae cD
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AUTHORS
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BH899413/c
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JOURNAL COMMENT
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Tel: 2404533151
Fax: 2404534580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14;
                                                                                                                                                       BP 44, Avenue Fontaule,
Tel: (33)468887309
Fax: (33)468887398
                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 556)
Derelle, E., Ferraz, C., Lagoda, P., Eychenie, S., Cooke, R., Rega
Sabau, X., Courties, C., Delseny, M., Demaille, J., Picard, A. and
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Eukaryota; Viridiplantae; Chlorophyta; Prasinophyceae; Mamiellales;
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Laboratoire Arago
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                                                                                                                                                                                                                                                                                                    DNA libraries for sequencing the genome of Ostreococcus tauri (Chlorophytae, Prasinophyceae): the smallest free-living euka
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Seq primer: M13 Reverse.
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                                                                                                                                        Email: h.moreau@obs-banyuls.fr
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/note="Vector: pSport1; Site 1: Sall; Site 2: Not1; Whole adult mosquices (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
                /organism="Ostreococcus
/mol_type="genomic DNA"
/strain="OTTH0595"
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/mol_type="mRNA"
/strain="RSP-ST (Reduced
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Determination of clone end sequences from Trypanosoma brucei GUTat 10.1 sheared DNA library
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Sheared DNA-85E2.TF Sheared DNA Trypanosoma
Sheared DNA-85E2, genomic survey sequence.
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Tel: 301 838 0200
Fax: 301 838 0208
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The Institute for Genomic Research
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Trypanosoma brucei
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                                         /db_xref="taxon:5691"
/clone="Sheared DNA-85E2"
/clone="Sheared DNA-85E2"
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/clone="Sheared DNA"
/clone="Nector: pUC18; Site_1: SmaI; Constructed at The /note="vector: pUC18; Site_1: SmaI; Constructed at The /note="vector: pUC18; Site_1: SmaI; Constructed at The /note="vector: pUC18; Site_1: SmaI; Constructed of Trypanosoma brucei (TREU927/4 GUTat 10.1) was mechanically sheared to give a tight size distribution (approx 2 kb).
The v + i method used for the library construction is described in detail in Smith, H.O. and Venter, J.C. (Making small insert libraries for whole genome shotgun sequencing projects. In Genome Sequencing: A Practical Approach, eds. M. Vaudin and B. Barell, Oxford University Press, 1999)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nelsayed@tigr.org
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/note="Vector: Bluescript; Site_1: EccRV; Site_2: EccRV;
Shotgun library prepared after sonication of the genomic
DNA. Blunt ligation in EccRV site of Bluescript. Size
selection of the inserts after agarose electrophoresis
between 1 and 3 kb."
112 c 174 g 111 t
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/strain="TREU927/4 GUTat 10.1"
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                             17000657050748 A.Gam.ad.cDNA.blood1
19600449725768 5', mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: HoltRA@celera.com Plate: NU01004ABH row: J Seq primer: M13 Reverse.
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45 w. Gude Dr., Rockville,
Tel: 2404533151
Fax: 2404534580
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19600449668153 5', mRNA
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/note="Vector: pSport1; Site 1: Sal1; Site 2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 chromosome) "
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lab_host="DH10b"
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'strain="RSP-ST (Reduced susc.
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clone="19600449668153"
                 GI:18898107
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100.0%; Pred. No. 3.;
tive 0; Mismatches
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DNA1 Anopheles gambiae cDNA clone
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. 3.2e+02;
ches 0;
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                                                         Anopheles gambiae cDNA clone
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                                                                                                                                                                                                                                      Length 561;
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Culicoidea;
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Holt,R.A., Lin,J.-J., Murphy,S.D., Evans,C.A., Kraft,C.L., Charlab,R., Collins,F.H., Venter,J.C. and Hoffman,S.L.
Celera Anopheles gambiae EST project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Anopheles gambiae
Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Eukaryota; Culicoidea;
                                    45 w. Gude Dr., Rockville,
Tel: 2404533151
Fax: 2404534580
Email: HoltRA@celera.com
                                                                                                                                                                                                                                                                                                                       BM621639
BM621639.1 GI:18920057
EST.
                                                                                                                                                        R., Collins, F.H., Venter
Celera Anopheles gambiae
                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta;
Neoptera; Endopterygota; Diptera; Nematocera; Culic
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Anopheles gambiae
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: HoltRA@celera.com Plate: NU01004AYG row: K Seq primer: M13 Reverse.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Holt R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished
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     Plate: NU01004AYL row:
Seq primer: M13 Reverse
                                                                                                           Celera Genomics
                                                                                                                             Contact: Holt R.A.
                                                                                                                                                                                                Holt,R.A., Lin,J.-J.,
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L: 2404533151
                                                                                                                                                                                                               (bases 1 to 569)
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/dev_stage="Adult"
/lab_host="DH10b"
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/mol_type="mRNA"
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100.0%;
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Venter,J.C. and H
ambiae EST project
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                       column: 10
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3.2e+02;
thes 0;
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Culicoidea;
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BM619639/c
       BASE COUNT
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Holt,R.A., Lin,J.-J.,
,R., Collins,F.H., Ver
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17000487440685 A.Gam.ad.cDNA1 Anopheles
19600449657860 5', mRNA sequence.
BM619639
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                                                                                                                                                                                                                                                                                                                     Email: HoltRA@celera.com
Plate: NU01004AB6 row: J
Seq primer: M13 Reverse.
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45 w. Gude Dr., Rockville,
Tel: 2404533151
Fax: 2404534580
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/clone lib="A.Gam.ad.cDNA1"
/note="Vector: pSport1; Site_1: Sall; Site_2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
151 c 188 g 90 t
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/note="Vector: pSport1; Site_1: Sal1; Site_2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
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chromosome)"
                                                                                                                                            /clone="19600449657860"
/dev_stage="Adult"
/lab_host="DH10b"
                                                                                                                                                                                                                    chromosome)"
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'strain="RSP-ST (Reduced
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lab_host="DH10b"
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Pred. No. 3.2e+02;
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Kraft, C.L., Charlab

std.

EST 25-FEB-2002

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Gaps

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REFERENCE
AUTHORS
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VERSION
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JOURNAL
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Best Local
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A1667035 577 bp
fC24912.y1 Zebrafish WashU MPIMG
IMAGE:3722374 5', mRNA sequence.
A1667035 A1667035.1 GI:4805391
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Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BM645614
17000687316797 A.Gam.ad.cDNA1 Ar
19600449663794 5', mRNA sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: HoltRA@celera.com Plate: NU01004187 row: E Seq primer: M13 Reverse.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Holt,R.A., Lin,J.-J., Murphy,S.D., Evans,C.A., Kraft,C.L., Charlab,R., Collins,F.H., Venter,J.C. and Hoffman,S.L. Celera Anopheles gambiae EST project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fax: 2404534580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              45 w. Gude Dr., Rockville, MD Tel: 2404533151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Celera Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Holt R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Anopheles gambiae (African malaria mosquito)
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                                                                                                                                                                                                                                                                                    137
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                                                                                                                                                                                                                                                                               /clone_lib="A.Gam.ad.cDNA1"
/note="Vector: pSport1; Site 1: Sal1; Site 2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     chromosome)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"
/strain="RSP-ST (Reduced susc. to Permethrin -
                                                                                                                                                                                                                                                                                                                                                                                                                                         clone="19600449663794"
                                                                                                                                                                                                                                                                                                                                                                                                                                                         db_xref="taxon:7165"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    organism="Anopheles gambiae"
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                                                                                                                                                                                                                                                                                                                                                                                                         ab_host="DH10b"
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100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                           stage="Adult"
                                                                                                                                                                                                     Score 14; DB 12; 1; Pred. No. 3.2e+02; 0; Mismatches 0;
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rerio
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                                              CDNA
                                              EST 07-JUN-2001
WA clone
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   RESULT 51
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BASE COUNT
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                                                                                                                                    Query Match
Best Local
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406
                                                     7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: zbrafish@watson.wustl.edu
CDNA Library Preparation: Matthew Clark. cDNA Library Arrayed by:
Matthew Clark. DNA Sequencing by: Washington University Genome
Sequencing Center Clone distribution: Genome Systems, St. Louis,
Missouri (web address: www.genomesystems.com) (email contact:
info@genomesystems.com) and Research Genetics, Huntsville, Alabama
(web address: www.resgen.com) (email contact: info@resgen.com) and
RessourcenZentrumPrimarDatenbank, Berlin, Germany (web address:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Clark, M., Johnson, S.L., Lehrach, H., Lee, R., Li, F., Marra, M., Eddy, S., Hillier, L., Kucaba, T., Martin, J., Beck, C., Wylie, T., Underwoo, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person, B., K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Ritter, E., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter, E., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter, E., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Waterston, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished
Contact: Stephen L. Johnson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and Wilson, R.
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1 (bases 1 to 577)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 High quality sequence stop: 481.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WashU Zebrafish EST Project 1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Danio rerio (zebrafish)
                                                                                                                                 Similarity
  AACGTTCGAGATGA 419
                                                     AACGTTCGAGATGA 20
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                                                                                                                                                                                                                                                                        double-stranded cDNA was ligated to Sal I adaptors (RRL), digested with Not I and cloned into the Not I and Sal I stees of the pSPORTI vector (BRL). Library was constructed by Matthew Clark (Lehrach lab; ICRF, London and Max planck Institut fuer Molekulare Genetik, Berlin). cDNAs for EST analysis were selected following oligonucleotide hybridization fingerprinting of arrayed clones from zebrafish late somitogenesis (26 ss), adult liver or embryonic shield stage (5.6 h) libraries. Pingerprint data were used to computationally cluster cDNAs, and a single cDNA from each cluster was chosen for sequencing. In some cases multiple members of the same cluster were sequenced to assess clustering parameters or single clones were sequenced additional times to assess quality
                                                                                                     66.7%;
ilarity 100.0%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           stage embryos"
/lab_host="XL1-blue MRF"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="mRNA"
/db_xref="taxon:7955"
/clone="IMAGE:3722374"
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                                                                                                       Score 14; DB; Pred. No. 3.2
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Teleostei;
                                                                                                                                                                                                                                              157
                                                                                                       3.2e+02;
hes 0;
                                                                                                                                                             DB 9;
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Ostariophysi; Cypriniform
                                                                                                                                                          Length 577;
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BM279238
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Matches 14
AUTHORS
TITLE
JOURNAL
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                                                                                                                                                                                                                                                                                                                                                                          426
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Plate: NU01004AYT row: O
Seq primer: M13 Ravarr
                                                                                                                                                                                                BM279238

Nb_ad1_04E02_M13 Nippostrongylus brasiliensis uni-zap adult library Nippostrongylus brasiliensis uni-zap adult library Nippostrongylus brasiliensis cDNA clone Nb ad1_04E02_5' similar to ref[NP_492164.1| (NM_059763) PDZ domain (Also known as DHR or GLGF). [Caenorhabditis, mRNA sequence.
                                                                                Nippostrongylus brasiliensis
Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Strongylida;
Trichostrongyloidea; Heligmonellidae; Nippostrongylinae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Holt,R.A., Lin,J.-J., Murphy,S.D., Evans,C.A., R., Collins,F.H., Venter,J.C. and Hoffman,S.L. Celera Anopheles gambiae EST project
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BM650798.1 GI:18950309
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19600449637545
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                                                                                                                                        Nippostrongylus brasiliensis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Neoptera; Endopterygota; Diptera; Nematocera;
Unpublished
                                Harcus, Y. and Maizels, R.M.
                                                                                                                                                                              BM279238.1 GI:17972496
                                                                                                                                                                                               BM279238
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                  Sequence survey of Nippostrongylus
                                                                   Nippostrongylus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                           CGAACGTTCGAGAT 413
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                                                  (bases 1 to 582)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
154 c 185 g 101 t
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/note="Vector: pSport1; Site 1: Sal1; Site 2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen.
cDNA inserts >500 bp cloned directionally into pSport 1.
Not 1 site is 3'. Clones available through the Malaria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            chromosome) "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Anopheles gambiae"
/mol_type="mRNA"
/strain="RSP-ST (Reduced susc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /clone="19600449637545"
/dev_stage="Adult"
/lab_host="DH10b"
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5', mRNA sequence.
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Pred. No. 3.2
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1 Anopheles gambiae
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                    brasiliensis
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REFERENCE
AUTHORS
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BF157792
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JOURNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         212
                                                                                                                                                                                                                                                                                      1 (bases 1 to 583)
Clark, M., Johnson, S.L., Lehrach, H., Lee, R., Li, F., Marra, M., Eddy
, S., Hillier, L., Kucaba, T., Martin, J., Beck, C., Wylie, T., Underwoo
, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person, B.,
Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter, E.,
Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Waterston, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BF157792 583 bp mRNA line I144g06.yl Sugano Kawakami zebrafish DRA Danio IMARES.3816778 5', mRNA sequence.
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Tel: +44 131 650 5511
Fax: +44 131 650 5450
                                                  Library constructed by Dr. Sumio Sugano and Dr. Koichi Kawakami DNA Sequencing by: Washington University Genome Sequencing Center Clone distribution information can be found through the I.M.A.G.E.
                                                                                                                                                                                                                                                                                                                                                                                                   Bukaryota; Metazoa; Chordata; Craniata;
Actinopterygii; Neopterygii; Teleostei;
Cyprinidae; Danio.
1 (hasaa 1 fo ca).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Danio rerio (zebrafish)
Danio rerio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IMAGE:3816778
BF157792
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Seq primer: M13
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Institute of Cell, Anim
University of Edinburgh
                  Consortium/LLNL, send email to: info@image.llnl.gov Seq primer: T3 ET from Amersham
                                                                                                                                    Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                            Contact: Stephen L. Johnson Washington University School of Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BF157792.1 GI:11052991
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The library was prepared by Murray Selkirk, Imperia London. Sequencing was performed by Yvonne Harcus,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: r.maizels@ed.ac.uk
High quality sequence
                                                                                              Email: zbrafish@watson.wustl.edu
Library constructed by Dr. Sumio
                                                                                                                                                                        4444 Forest Park Parkway, Box 8501,
                                                                                                                                                                                                                                  Unpublished
                                                                                                                                                                                                                                                      WashU Zebrafish EST Project 1998
                                                                                                                                                                                                                                                                        and Wilson, R
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/clone="Nb adl 04E02"
/dev_stage="adult"
/clone_lib="Nippostrong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
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mol_type="mRNA"
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stop:
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Ostariophysi; Cypriniformes
                                                                                                                                                                              Louis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 582;
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Harcus, Edinburgh
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                                                                                                                                                                                                                                                                                               Anopheles.

1 (bases 1 to 588)

Holt,R.A., Lin,J.-J., Murphy,S.D., Evans,C.A., Kraft,C.L., Charlab,R., Collins,F.H., Venter,J.C. and Hoffman,S.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 588 bp mRNA linear EST 26 17000687502159 A.Gam.ad.cDNA1 Anopheles gambiae cDNA clone 19600449617012 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7
                                                                                                                                                                                                                                   Celera Genomics
45 w. Gude Dr., Rockville,
Tel: 2404533151
                                                                                                                                                                                                                                                                                                                                                                                                   Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
                                                                                                                                                                                  Email: HoltRA@celera.com
Plate: NU01004N8A row: H
                                                                                                                                                                                                                                                                                        Contact: Holt R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EST
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                                                                                                                                                                                                                       Fax: 2404534580
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Anopheles gambiae (African malaria mosquito)
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                                                                                                                                                                    primer: M13 Reverse
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148 c 152 g 143 t 1 others
                                                                  /organism="Anopheles gambiae"
/mol_type="mRNA"
/strain="RSP-ST (Reduced susc
chromosome)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /lab_host="DH10B (phage resistant)"
/clone lib="Sugano Kawakami zebrafish DRA"
/clone lib="Sugano Kawakami zebrafish DRA"
/clone lib="Sugano Kawakami zebrafish DRA"
/note="Vector: pME185-FL3; Site_1: DraIII (CACTGTGTG);
Site_2: DraIII (CACCATGTG); 1st strand cDNA was primed with an oligo(dT) primer [ATGTGGCCTTTTTTTTTTTTTTT];
double-stranded cDNA was ligated to a DraIII adaptor [TGTTGGCCTACTGG], digested and cloned into distinct DraIII sites of the pME185-FL3 vector [5' site CACTGTGTG, 3' site CACCATGTG). XhoI should be used to isolate the cDNA insert. Size selection was performed to exclude fragments
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /sex="mixed (one male and unfertilized eggs)"
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/clone="19600449617012"
/dev_stage="Adult"
/lab_host="DH10b"
                                                    db_xref="taxon:7165"
                                                                                                                                                   ocation/Qualifiers
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/mol_type="mRNA"
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3.2e+02;
hes 0;
                                                                                    susc.
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                                                                                  to Permethrin -
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AUTHORS
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KEYWORDS
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Matches
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                                                                                                     Best Local
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Best Local
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                                                                                    14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fax: 2404534580
                                                                                                   Similarity
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                 CGAACGTTCGAGAT 429
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Anopheles.

1 (bases 1 to 592)

Holt,R.A., Lin,J.-J., Murphy,S.D.,
,R., Collins,F.H., Venter,J.C. and
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17000687369980 A.Gam.ad.cDNA1 Anopheles
19600449651232 5', mRNA sequence.
BM649878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Celera Genomics
45 w. Gude Dr., Rockville,
Tel: 2404533151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: HoltRA@celera.com Plate: NU010049W6 row: I Seq primer: M13 Reverse.
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Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Holt R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Anopheles gambiae (African malaria mosquito)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BM649878.1 GI:18949389
CGAACGTTCGAGAT 18
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                                      Conservative
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                                                                                                                                 /clone_lib="A.Gam.ad.cDNA1"
/note="Vector: pSport1; Site_1: Sal1; Site_2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
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/note="Vector: pSport1; Site 1: Sal1; Site 2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
                                                                                                                                                                                                                                                                                                                                                                                     chromosome) "
                                                                                                                                                                                                                                                                                                      dev_stage="Adult"
lab_host="DH10b"
                                                                                                                                                                                                                                                                                                                                                                                                          mol_type="mRNA"
strain="RSP-ST (Reduced susc. to Permethrin -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                          clone="19600449651232"
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100.0%; Pr
                                                           66.7%;
100.0%;
                                      0,
                                                         Score 14; DB 12;
Pred. No. 3.2e+02;
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Pred. No. 3.2
0; Mismatches
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Hoffman, S.L.
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                                                                          Length 592;
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REFERENCE
AUTHORS
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BM622534/c
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BM624679/c
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                                                     REFERENCE
                                                                                                                                    SOURCE
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Best Local S
Matches 14
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17000687491666 A.Gam.ad.
19600449643241 5', mRNA
Anopheles.

1 (bases 1 to 595)

Holt,R.A., Lin,J.-J., Murphy,S.D., Evans,C.A., R., Collins,F.H., Venter,J.C. and Hoffman,S.L. Celera Anopheles gambiae EST project
                                                                             Anopheles gambiae (African malaria mosquito)
Anopheles gambiae
Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Eukaryota; Metazoa; Arthropoda; Nematocera; Culicoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      45 w. Gude Dr., Rockville, Tel: 2404533151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Holt,R.A., Lin,J.-J., Murphy,S.D., Evans,C.A., R., Collins,F.H., Venter,J.C. and Hoffman,S.L. Celera Anopheles gambiae EST project
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Anopheles gambiae
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BM622534.1
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Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
                                                                                                                                                                                                17000687476438 A.Gam.ad.
19600449643086 5', mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Plate: NU01004AY9 row:
Seq primer: M13 Reverse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: HoltRA@celera.com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Celera Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Holt R.A.
                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                       CGAACGTTCGAGAT 446
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                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone_lib="A.Gam.ad.cDNA1"
/note="Vector: pSport1; Site 1: Sal1; Site 2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
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/strain="RSP-ST (Reduced susc.
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                                                                                                                                                                     GI:18922045
                                                                                                                                                                                                                                                                                                                                                                                                     66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      host="DH10b"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         stage="Adult"
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Pred. No.
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cDNA1 Anopheles
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3.2e+02;
hes 0;
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                                  Kraft, C.L.,
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CDNA clone
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JOURNAL COMMENT
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VERSION
KEYWORDS
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BM632552/c
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DEFINITION
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JOURNAL
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                426
                                                                                                                                                                             Celera Genomics
45 w. Gude Dr., 1
Tel: 2404533151
Fax: 2404534580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14;
                                                                                                                                                                                                                                                                                                                                                             Anopheles gambiae (African malaria mosquito)
Anopheles gambiae
Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
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17000687504447 A.Gam.ad.cDNAI Anopheles
19600449625402 5', mRNA sequence.
BM632552
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Holt,R.A., Lin,J.-J., Murphy,S.D.,
,R., Collins,F.H., Venter,J.C. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tel: 2404533151
Fax: 2404534580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished Contact: Holt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Seq primer: M13 Reverse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: HoltRA@celera.com Plate: NU01004AY9 row: 1
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                                                                                                                                           Email: HoltRA@celera.com
Plate: NU01004NBW row:
                                                                                                                                                                                                                                                Contact: Holt R.A.
                                                                                                                                                                                                                                                               Unpublished
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ilarity 100.0%;
Conservative (
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/note="Vector: pSport1; Site_1: Sal1; Site_2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
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/mol type="mRNA"
/strain="RSP-ST (Reduced susc.
chromosome)"
                              /organism="Anopheles gambiae"
/mol_type="mRNA"
/strain="RSP-ST (Reduced susc
chromosome)"
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               db_xref="taxon:7165"
                                                                                                             ocation/Qualifiers
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| lab_host="DH10b"
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clone="19600449625402"
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                                                                                                                                                                                                              Rockville,
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Pred. No.
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3.2e+02;
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                                                                                                                                                                                                                                                                                              Evans, C.A.,
Hoffman, S.L
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KEYWORDS
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431
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: HoltRA@celera.com Plate: NU01004I8A row: I column: Seq primer: M13 Reverse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   45 w. Gude Dr., Rockville,
Tel: 2404533151
Fax: 2404534580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Holt, R.A., Lin, J.-J., Murphy, S.D., Evans, C.A., R., Collins, F.H., Venter, J.C. and Hoffman, S.L. Celera Anopheles gambiae EST project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Anopheles gambiae (African malaria mosquito)
Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
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BM639133.1 GI:18938644
EST.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished
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19600449666203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Holt R.A.
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CGAACGTTCGAGAT 418
                          CGAACGTTCGAGAT 18
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                                                                  66.7%; So ilarity 100.0%; I Conservative 0;
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//clone_lib="A.Gam.ad.cDNA1"
//clone_lib="A.Gam.ad.cDNA1"
//note="Vector: pSport1; Site_1: Sal1; Site_2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen.
cDNA inserts >500 bp cloned directionally into pSport 1.
Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center
(www.malaria.mr4.org)."
                                                                                                                                                    /clone_lib="A.Gam.ad.cDNA1"
/note="Vector: pSport1; Site 1: Sall; Site 2: Not1; Whole adult morguitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
158 c 194 g 104 t
                                                                                                                                                                                                                                                                                                       /clone="19600449666203"
/dev_stage="Adult"
/lab_host="DH10b"
                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"
/strain="RSP-ST (Reduced susc.
                                                                                                                                                                                                                                                                                                                                                                                                                                     organism="Anopheles gambiae"
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Pred. No.
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DNA1 Anopheles gambiae cDNA clone
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3.2e+02;
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AQ837727
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les 14; Conserv
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BM621612
BM621612.1
EST.
                                                         BM621612 606 bp mRNA 17000687447485 A.Gam.ad.cDNA1 Anopheles 19600449636865 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tel: (206) 616-3618
Fax: (206) 616-3887
Email: jwallace@u.washington.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Clones are derived from the human BAC library RPCI-11. For BAC library availability, please contact Pieter de Jong (pieter@dejong.med.buffalo.edu). Clones may be purchased from BACPAC Resources (http://bacpac.med.buffalo.edu/ordering bac.htm or from Resear h Genetics (info@resgen.com). BAC end Web Server:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AQ837727
601 bp DNA linear GSS 30-AUG HS_5413_B2_D06_T7A RPCI-11 Human Male BAC Library Homo sapiens genomic_clone Plate=989 Col=12 Row=H, genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   High quality sequence stop: 601.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              High Throughput Sequencing Center
University of Washington
401 Queen Anne Avenue North, Seattle, WA 98109, USA
Tel: (206) 616-3618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (Dases 1 to 601)
Mahairas,G.G., Wallace,J.C., Smith,K., Swartzell,S., Holzman,T.,
Mahairas,G.S., Shaker,R., Furlong,J., Young,J., Zhao,S., Adams,M.D. au
Teller,A., Shaker,R., Furlong,J., Young,J., Zhao,S., Adams,M.D. au
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Seq primer: T7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         http://www.htsc.washington.edu
Plate: 989 row: H column: 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     scanning the human genome
Proc. Natl. Acad. Sci. U.S.A. 96 (17), 9739-9744 (1999)
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                                                                                                                                                                                                                                                                                               66.7%;
ilarity 100.0%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                   /note="Vector: pBACe3.6; Site_1: EcoRI; Site_2: EcoRI; Male blood DNA was isolated from one randomly chosen donor and partially digested with a combination of EcoRI and EcoRI Methylase. Size selected DNA was cloned into the pBACe3.6 vector at EcoRI sites"

114 c 116 g 195 t 10 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'sex="male"
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/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     clone_lib="RPCI-11 Human Male BAC Library"
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Pred. No. 3.2
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3.2e+02;
hes 0;
                                                                                 gambiae cDNA
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                                                                                                                                                                                                                                                                                             survey sequence.
BH416973
BH416973.1 GI:17
GSS.
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Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
 Plate:
Class:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: HoltRA@celera.com
Plate: NU01004AYL row: C
Seq primer: M13 Reverse.
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               Email: walbot@stanford.edu
Plate: 1007052 column: 30
                                               855 California Ave, Palo
Tel: 650 723 2227
Fax: 650 725 8221
                                                                                              Department of Biological Sciences Stanford University
                                                                                                                                  Contact: Walbot V
                                                                                                                                                                                                         Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
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                                                                                                                                                              Maize genomic sequences found using engineered
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162 c 201 g 88 t
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/strain="RSP-ST (Reduced susc.
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/lab_host="DH10b"
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3.2e+02;
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Holt, R.A., Lin, J.-J., Murphy, S.D., Ev.
R., Collins, F.H., Venter, J.C. and Hc
Celera Anopheles gambiae EST project
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45 w. Gude Dr., Rockville,
Tel: 2404533151
Fax: 2404534580
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17000687509206 A.Gam.ad.cDNA1 Anopheles
19600449654085 5', mRNA sequence.
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Seq primer: M13 Reverse.
                                                                                                                                                                                                                                                                                         Email: HoltRA@celera.com
                                                                                                                                                                                                                                                                                                                                                                                   Contact: Holt R.A.
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ilarity 100.0%;
Conservative
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/clone lib="1007 - RescueMu Grid H"
/note="Organ: leaf; Vector: RescueMu (engineered from
pBlueScript backbone); Site 1: BamHI; Site 2: BgIII;
RescueMu is a 4.9 kb, modified maize Mu transposon
designed to allow plasmid rescue from total genomic DNA.
Mu elements insert preferentially into transcription
units. For more information on RescueMu, go to the web
site 'www.zmdb.iastate.edu' and follow the links for
'RescueMu.' Grid H was grown at Berkeley in 2001. DNA
was extracted from leaf punches, double digested using
BamHI and BgIII, and ligated to form circular plasmids.
DH10B cells were transformed and then screened on LB
plates with ampicillin."
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/clone_lib="A.Gam.ad.cDNA1"
/note="Vector: pSport1; Site_1: Sal1; Site_2:
/note="Vector: pSport1; Site_1: Sal1; Site_2:
dult mosquitoes (mixed sex) frozen on liquid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /tissue_type="leaf"
/dev_stage="adult"
/lab_host="DH108"
                                                       /db xref="taxon:7165"
/clone="19600449654085"
/dev_stage="Adult"
/lab_host="DH10b"
                                                                                                                                 chromosome) "
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/cultivar="mixed background W23/A188/B73"
/db_xref="taxon:4577"
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                                                                                                                                                       strain="RSP-ST (Reduced
                                                                                                                                                                     organism="Anopheles gambiae"
mol_type="mRNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tel: 2404533151
Fax: 2404534580
Email: HoltRA@celera.com
Plate: NU0100418B row: O c
Seq primer: M13 Reverse.
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Anopheles gambiae
Eukaryota, Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
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17000687493212 A.Gam.ad.cDNA1 And
19600449662124 5', mRNA sequence.
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164 C 202 g 95 t
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/note="Vector: pSport1; Site_1: Sal1; Site_2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >50 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
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/mol_type="mRNA"
/strain="RSP-ST (Reduced susc.
chromosome)"
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/lab_host="DH10b"
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                                                                                                                               Score 14; DB 12; Pred. No. 3.2e+02;
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Pred. No.
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Anopheles gambiae cDNA clone
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Hoffman, S.L.
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                                                                                                                                                                                                                                                                                                                                                                                  510
                                                                                                           Anopheles gambiae (African malaria mosquito)
Anopheles gambiae
Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
                                                                                                                                                                                                                                         BM591817
17000687435900 A.Gam.ad.cDNA.blood1
19600449730335 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        14;
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Tel: (206) 616-3618
Fax: (206) 616-3887
Email: jwallace@u.washington.edu
Clones may be purchased from Research Genetics (info@resgen.com)
BAC end Web Server: http://www.htsc.washington.edu
Plate: 4867 row: I column; 1
Seq primer: T7
Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 617)

Mahairas,G.G., Wallace,J.C., Smith,K., Swartzell,S., Holzman,T.,
Keller,A., Shaker,R., Furlong,J., Young,J., Zhao,S., Adams,M.D. an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence.
AQ880074
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High Throughput Sequencing Center
University of Washington
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Celera Anopheles
Unpublished
                                     Holt,R.A., Lin,J.-J., Murphy,S.D., Evans,C.A., Kraft,C.L., R., Collins,F.H., Venter,J.C. and Hoffman,S.L.
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Location/Qualifiers
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/note="Organ: sperm; Vector: pBeloBAC11; BAC Clones in
E-Coli DH10B"
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/db_xref="taxon:9606"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              clone="Plate=4867 Col=1 Row=1"
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Contact: Brendan Loftus
Department of Eukaryotic Genomics
TIGR
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Tel:
                                                                                                                                                                                                                                                                                                     Aedes aegypti
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea; Aedes.
1 (Dases 1 to 627)
Loftus,B., Shetty,J., Knudson,D. and Severson,D.
BAC end sequencing of Aedes aegypti
                                                                                                                                                                                                                                                                                                                                                                                                            GSS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: HoltRA@celera.com Plate: NU010049UV row: I Seq primer: M13 Reverse.
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Tel: 2404533151
Fax: 2404534580
                                                                                                                                                   Email: enta@tigr.org
Library was provided by
Seq primer: T7
                                                                                                                                                                                                                                                                                           Unpublished
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CC120030.1
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Celera Genomics
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/lab_host="DH10b"
/clone_lib="N.Gam.ad.cDNA.blood1"
/clone_sib="N.Gam.ad.cDNA.blood1"
/note="Vector: pSport1; Site_1: Sal1; Site_2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen 24 hours after human blood feeding. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)"
146 a 160 c 199 g 114 t
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                                                                                                                                                                                                                     Medical Center Drive,
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/clone="19600449730335"
/dev_stage="Adult"
                                                       /mol_type="genomic |
/strain="Liverpool"
/clone_lib="Notre.Dame Liverpool"
/note="Vector: pECBAC1; Site_1: Hind
                               /db_xref="taxon:7159"
/clone="NDL.76020"
                                                                       /organism="Aedes aegypti"
/mol_type="genomic DNA"
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/mol_type="mRNA"
/strain="RSP-ST (Reduced susc.
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Contact: Blaxter ML
Institute of Cell, Animal and Population Biology
University of Edinburgh
Ashworth Labs, King's Buildings, West Mains Road
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The Trichuris muris EST dataset (including the TMC clustering information) is available on the www at http://www.ed.ac.uk/(tilde
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MBTmAdA198SAC Trichuris muris (parasitic r
Trichuris muris cDNA clone MBTmAdA198 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Seq primer: SAC (GGGAACAAAAGCTGGAG)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tel: +44 131 650 6760 Fax: +44 131 670 5450
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Nematoda; Enoplea; Trichocephalida; Trichuridae
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BACKWARD: T7PL (CTCACTATAGGGCGAATTGG)
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66.7%; Starity 100.0%; Conservative 0;
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                                                                                                 /note="Vector: Lambda Zap II; Site_1: EcoRI (5'end); Site_2: XhoI (3'end); Trichuris murils is a nematode parasite of rodents related to the human whipworm Trichuris trichiura. The library was constructed from Trichuris muris adults (Edinburgh 'E' strain) maintained in mice, and was govided by Dr. Richard Grencis, University of Manchester."
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by David Severson at the University of Notre Dame and
Hongbin Zhang"
a 148 c 149 g 171 t
                                                                                                                                                                                                                                                                       /dev_stage="adult"
/clone_lib="Trichuris muris (parasitic nematode) mixed
adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .628
                                                                                                                                                                                                                                                                                                                                 'sex="mixed"
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'db_xref="taxon:70415"
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                                      Length 628;
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nematode) mixed adult
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BM622163/c
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AUTHORS
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BM641079/c
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                                 Anopheles gambiae
Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda;
Eukaryota; Metazoa; Diptera; Nematoos
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Anopheles.
I (bases 1 to 629)
Holt,R.A., Lin,J.-J.,
                                                                                                                                          17000687475928 A.Gam.ad
19600449654480 5', mRNA
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Email: HoltRA@celera.com
Plate: NU01004N8I row: N
Seq primer: M13 Reverse.
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Holt,R.A., Lin,J.-J., Murphy,S.D., Evans,C.A.,
,R., Collins,F.H., Venter,J.C. and Hoffman,S.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Anopheles gambiae (African malaria mosquito)
Anopheles gambiae
Bukaryota, Metazoa; Arrhropoda; Hexapoda; Inso
Neoptera; Endopterygota; Diptera; Nematocera;
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EST.
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19600449621382 5', mRNA sequer
                                                                                    Anopheles gambiae (African malaria mosquito)
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                                                                                                                                                                                                                                                                                                                                                                          153
                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                             /clone_lib="A.Gam.ad.cDNA1"
/note="Vector: pSport1; Site_1: Sal1; Site_2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen.
                                                                                                                                                                                                                                                                                                                                                                         Research and Reference Reagent Resource (www.malaria.mr4.org)."
163 c 208 g 104 t
                                                                                                                                                                                                                                                                                                                                                                                                            adult mosquitoes (mixed sex) frozen on liquid nitrogen. CDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3. Clones available through the Malaria
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/mol_type="mRNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   clone="19600449621382"
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  Murphy, S.D.,
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Pred. No.
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1.cDNA1 An
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Anopheles gambiae
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3.2e+02;
hes 0;
                                            Nematocera;
 Evans, C.A.,
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era; Culicoidea;
                                                        Insecta;
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                                            ecta; Pterygota;
Culicoidea;
 Kraft, C.L., Charlab
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BM655453/c
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45 w. Gude Dr.,
Tel: 2404533151
Fax: 2404534580
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,R., Collins,F.H., Ven
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Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta;
Neoptera; Endopterygota; Diptera; Nematocera; Culi
                                                                                                                                                                                                                                                               Unpublished
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19600449627614 5', mRNA
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                                                                                                                                     Email: HoltRA@celera.com Plate: NU010049VY row: A
                                                                                                                                                                                                                            Celera Genomics
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                                                                                                                                                                                                                                                                               Celera Anopheles gambiae EST project
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Fax: 2404534580
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45 w. Gude Dr.,
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/clone="19600439654480"
/dev stage="Adult"
/lab host="DH10b"
/clone_lib="A.Gam.ad.cDNA1"
/clone_tib="A.Gam.ad.cDNA1"
/note="Vector: pSport1; Site_1: Sal1; Site_2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen.cDNA inserts >500 bp cloned directionally into pSport 1.
Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
39 a 166 c 201 g 123 t
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/mol type="mRNA"
/strain="RSP-ST (Reduced susc
chromosome)"
/db_xref="taxon:7165"
                                                                                                    Location/Qualifiers
                       "mol_type="mRNA"
'strain="RSP-ST (Reduced susc.
:hromosome)"
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                                                                   organism="Anopheles gambiae"
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Pred. No.
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cDNA1 Anopheles
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3.2e+02;
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Culicoidea;
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RESULT 72
BM625565/c
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45 w. Gude Dr., Rockville,
Tel: 2404533151
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17000687493286 A.Gam.ad.cDNA1 Ar
19600449629012 5', mRNA sequence
BM625565
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Plate: NU01004ABZ row: L
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,R., Collins,F.H., Venter,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pteryç
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
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BM625565.1 GI:18925076
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                    Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (bases 1 to 631)
                                                                                                                                                                                                                                                                                                                                                                                 primer: M13 Reverse
                                                                                     153
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   Conservative
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                                                                            /clone lib="A.Gam.ad.cDNA1"
/note="Vector: pSport1; Site 1: Sal1; Site 2: Not1; Whole adult mosquiroes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
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/note="Vector: pSport1; Site 1: Sal1; Site 2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
                                                                                                                                                                                                                                                                                 /organism="Anopheles gambiae"
/mol_type="mRNA"
/strain="RSP-ST (Reduced susc
chromosome)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /dev_stage="Adult"
/lab_host="DH10b"
                                                                                                                                                                                                                /lab host="DH10b"
                                                                                                                                                                                                                                 /clone="19600449629012"
/dev_stage="Adult"
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                 100.0%;
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               Score 14; I
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence.
   Mismatches
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Anopheles gambiae cDNA clone
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DB 12; I
. 3.2e+02;
hes 0;
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                                Length 631;
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RESULT 74
BM597192/c
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BM654222/c
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JOURNAL
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Best Local
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                                                                                                                                                                                                                                                                                                                            14;
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                                                                                                                              633 bp п
17000687490421 A.Gam.ad.cDNA.blood1
19600449718154 5', mRNA sequence
BM597192
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Anopheles gambiae
Eukaryota, Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
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17000687380327 A.Gam.ad.cDNA1 Anopheles
19600449631529 5', mRNA sequence.
                                                              Anopheles gambiae (African malaria mosquito)
Anopheles gambiae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: HoltRA@celera.com Plate: NU010049W1 row: D Seq primer: M13 Reverse.
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45 w. Gude Dr., Rockville,
Tel: 2404533151
Fax: 2404534580
                                               Eukaryota;
                                                                                                              BM597192.1
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                Anopheles.
                              Neoptera; Endopterygota;
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                                                                                                                                                                                                                                                                                                                                                                                                  /clone_lib="A.Gam.ad.cDNA1"
/note="Vector: pSport1; Site_1: Sal1; Site_2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center (www.malaria.mr4.org)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Anopheles gambiae"
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/strain="RSP-ST (Reduced susc.
chromosome)"
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'lab_host="DH10b"
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'clone="19600449631529"
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                              Metazoa; Arthropoda; Hexapoda; Insecta; Pteryç
Endopterygota; Diptera; Nematocera; Culicoidea;
                                                                                                                GI:18895295
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3.2e+02;
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Hoffman, S.L.
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Les gambiae cDNA clone
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RESULT 75
BM636272/c
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45 w. Gude Dr., Rockville,
Tel: 2404533151
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                                                                                                                                                                   Celera Genomics
45 w. Gude Dr., Rockville,
Tel: 2404533151
Fax: 2404534580
                                                                                                                                                                                                                                                                                          Anopheles.

1 (bases 1 to 636)

1 (bases 1 to 636)

Holt, R.A., Lin, J.-J., Murphy, S.D., Evans, C.A., Kraft, C.L., Charlab, R., Collins, F.H., Venter, J.C. and Hoffman, S.L.
                                                                                                                                                                                                                                                                                                                                                                        Anopheles gambiae (African malaria mosquito)
Anopheles gambiae
Eukaryota, Metazoa; Arthropoda, Hexapoda, Insecta, Pterygota,
Neoptera, Endopterygota, Diptera, Nematocera, Culicoidea,
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17000668938404 A.Gam.ad.cDNA1 Anopheles gambiae cDNA clone
19600448419407 5', mRNA sequence.
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Plate: NU010049VS row: M
Seq primer: M13 Reverse.
                                                                                                                              Email: HoltRA@celera.com
Plate: NU010048I4 row: C
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                                                                                                               primer: M13 Reverse
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/organism="Anopheles gambiae"
/mol_type="mRNA"
/strain="RSP-ST (Reduced susc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone="19600449718154"
/dev_stage="Adult"
/lab_host="DH10b"
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/mol_type="mRNA"
/strain="RSP-ST (Reduced susc. to Permethrin -
                                                                                       Location/Qualifiers
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s; Pred. No. 3.2e+02;
               (Reduced susc. to Permethrin
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                                        5 CGAACGTTCGAGAT 18
CGAACGTTCGAGAT 356
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                                                                                66.7%; Score 14; DB 12; Length 636; ilarity 100.0%; Pred. No. 3.2e+02; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                    /clone lib="A.Gam.ad.cDNA1"
/note="Vector: pSport1; Site 1: Sal1; Site 2: Not1; Whole adult mosquitoes (mixed sex) frozen on liquid nitrogen.
cDNA inserts >500 bp cloned directionally into pSport 1.
Not 1 site is 3'. Clones available through the Malaria Research and Reference Reagent Resource Center
(www.malaria.mr4.org)."
                                                                                                                                                                                                                                                                                                                                                                  dev_stage="Adult"
lab_host="DH10b"
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'clone="19600448419407"
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ORIGIN

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Job time : 1320 secs Search completed: December 17, 2003, 10:00:44 밁 Ś This Page Blank (uspto)

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The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (I) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune
                                                                                                       Claim
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The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (I) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I)
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The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (I) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I); (I) has antiallergic, antiasthmatic, viruride, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or symptom of an immunoglobulin E (IGE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide from
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-NOV-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Immunomodulatory polynucleotide for modulating an immune response subject suffering from disorders associated with Th2-type immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fearon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-DEC-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          immunostimulatory sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (DYNA-) DYNAVAX TECHNOLOGIES CORP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          e.g. allergy, or infectious disease, comprises
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antibacterial;
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                                                                                                                                                                                                                                                                                                                                                                                                                       English.
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Pred. No.
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                             The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (I) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
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individual suffering from disorders associated with a Th2-type response, especially an allergy or asthma, or an infectious dis also useful for increasing interferon-gamma (IFN-gamma) in individual having idiopathic pulmonary fibrosis, or IFN-alpha
                                                                                                                                                                                                                                 Example 1; Page 20; 95pp; English.
                                                                                                                                                                                                                                                                                  Immunomodulatory polynucleotide for modulating an immune response in subject suffering from disorders associated with Th2-type immune response, e.g. allergy, or infectious disease, comprises an
                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-657426/70.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ISS immunomodulatory oligonucleotide SEQ ID NO:14.
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                                                                                                                                                                                                                                                                   .mmunostimulatory sequence
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19; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sthma; infectious disease; interferon-gamma; IFN-gar pulmonary fibrosis; viral infection; mycobacterial
                                                                                                                                                                                                                                                                                                                                                                                              Dina D;
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Best Local S
Matches 16
The invention relates to a method for modulating cell death or reducing DNA damage in an eukaryotic cell by contacting the cell with an agent that modulates the biological activity of DNA-dependent protein kinase (DNA-PK). The invention also relates nucleic acids which modulate the immune response binding to Ku antigen, resulting in activation of DNA-PK. The method is useful for modulating cell death or reducing DNA damage in an eukaryotic cell, for treating any disorder resulting from a genotoxic insert to a cell e.g., necrosis, apoptosis. The method is also useful for treating cell death-related indications such as Alzheimer's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or symptom of an immunoglobulin E (IgB)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide from
                                                                                                                                                                                                                           Modulating cell death or reducing DNA damage in eukaryotic cells, useful for reducing cell death in individual or organ, comprises contacting cell with agent modulating biological activity of DNA-dependent protein kinase
                                                                                                                                                                                                                                                                                                                                                                                                                                   05-MAY-2000; 2000US-202274P.
17-JAN-2001; 2001US-262321P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-MAY-2001; 2001WO-US14508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cell death; DNA damage; DNA-dependent protein kinase; DNA-PK; necrosis; immune response; apoptosis; Alzheimer's disease; Parkinson's disease; rheumatoid arthritis; inflammation; osteoporosis; myocardial infarction; liver disease; reperfusion injury; carcinoma; multiple sclerosis; stroke; amyotrophic lateral sclerosis; Acquired Immune Deficiency Syndrome; AIDS; head injury damage; aplastic anaemia; tumour; organ transplantation; cerebral infarction; follicular lymphomas; systemic lupus erythematosus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAD24905 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                        Example 1; Page 31; 57pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unidentified.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                 (REGC )
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                                                                                                                                                                                                                                                                                                                         2002-062244/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          infection; glomerulonephritis; apoptosis;
s; immunostimulatory oligodeoxynucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ω
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                                                                                                                                                                                                                                                                                                                                                          Lois AF,
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                                                                                                                                                                                                                                                                                                                                                            Takabayashi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          autoimmune disorder; ISS-ODN; ds.
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Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           central nervous system inflammation, osteoporosis, degenerative liver disease, cerebellar degeneration, reperfusion injury, multiple sclerosis, amyotrophic lateral sclerosis, myocardial infarction, head injury damage, acquired immunodeficiency syndrome (AIDS), aplastic anaemia, cerebral infarction, bypass heart surgery, organ transplantation. The method is also useful for treating follicular lymphomas, carcinomas, autoimmune disorders (systemic lupus erythematosus), hormone dependent tumours, immune mediated glomerulonephritis; apoptosis and viral infections. The present sequence is immunostimulatory oligodeoxynucleotide (ISS-ODN) used for identifying ISS-binding protein, which is used in the
immune response against an antigen to a level greater that the host immune response to either the IMM, antigen or ISS-PN alone. These responses to ISS-PN/IMM conjugates are particularly acute during the important early phase of the host immune response to an antigen. The ISS-PN/IMM conjugates boost both humoral (antibody) and cellular
                                                                                                                              This is the nucleotide sequence of DY1018, which is conjugated to beta-gal to form ISS-PN/IMM, comprising an immunomodulatory molecule
                                                                                                                                                                                                             New immunomodulatory compositions - comprising an antigen conjugated to a polynucleotide that contains an immunostimulatory sequence
                                                                                                                                                                                                                                                                                                                                                                                              09-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DY1018; beta-gal; ISS-PN/IMM; antigen; immune response; antibody;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nucleotide sequence of DY1018
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                                                                 (IMM), which comprises an antigen conjugatory nucleotide sequence (PN) that contains at least one immunostimulatory nucleotide sequence (ISS). The conjugate synergistically boost the magnitude of the host (ISS).
                                                                                                                                                                                Example 1; Page 36; 69pp; English.
                                                                                                                                                                                                                                                               WPI; 1998-261028/23.
                                                                                                                                                                                                                                                                                               Carson DA,
                                                                                                                                                                                                                                                                                                                                                               11-OCT-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           immunisation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    exemplification of the invention.
                                                                                                                                                                                                                                                                                                                              (REGC ) UNIV
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                                                                                                                                                                                                                                                                                                                               CALIFORNIA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          anaphylaxis; IgE;
                                                                                                                                                                                                                                                                                                                                                               96US-0028118.
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                                                                                                                                                                                                                                                                                               Roman M;
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                                                   This is the ISS-ODN DY1018 nucleotide sequence.

The invention relates to a method for preventing or reducing antigen-stimulated, granulocyte-mediated tissue inflammation in a mammal, by administering an immunostimulatory oligonucleotide (ISS-ODN), where:

(a) reduction in, or the absence of, a Th2 type immune response is measured; or (b) there is a reduction or absence of other clinical signs of inflammation in the host after antigen challenge. The method is used to reduce or suppress granulocyte-mediated inflammation in a host tissue, and to modulate the host's immune responsiveness to an antigen, particularly where the subject suffers from asthma, nasal polyposis, allergic rhinitis, atopic dermatitis, allergic conjunctivitis, allergic responsive provided in an antigen or cutaneous basephil hypersensitivity, Unlike prior art treatment by antigen immunication the method is an antigen-identication the method.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (Thi type) immune responses of the host. Thus, use of the method to boost the immune responsiveness of a host to subsequent challenge by sensitising antigen without immunisation avoids the risk of Th2-mediated, immunisation-induced anaphylaxis by suppressing IgE production in response to the antigen challenge. The conjugates can also be used to combat pathogenic infection and to stimulate therapeutic angiogenesis to treat conditions in which localised blood
antigen immunisation, the method is an antigen-independent method, and avoids host production of both interleukin-4 (IL-4), which carries risk of anaphylaxis, and IL-5 which actually encourages granulocyte
                                                                                                                                                                                                                                                                                                                                                                             Reducing antigen-stimulated granulocyte-mediated inflammation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ray E;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         eosinophilic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             immune responsiveness modulation; idiopathic hypereosiniphilic syndrome; curaneous basophil hypersensitivity; ISS-ODN; asthma; nasal polyposis; allergic rhinitis; atopic dermatitis; allergic confinentiis; atopic dermatitis; allergic confinentiis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antigen-stimulated inflammation; immunostimulatory oligonucleotide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ISS-ODN DY1018 nucleotide sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              plays a significant etiological role, e.g. retinopathies
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                                                                                                                                                                                                                                                                                                                                       Page 30; 69pp; English.
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100.0%; Pr
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                                                                                                                                                         The invention relates to immunomodulatory oligonucleotides that comprise at least 1 immunostimulatory octanucleotide sequence (ISS) where the ISS compared to the sequence are selected from the group consisting of AACGTTCC, AACGTTCG, GACGTTCG, and GACGTTCG. The immunomodulatory sequences are used to treat patients needing immune regulation, such as those suffering from cancer, an allergic disease and asthma. They are also used to prevent infectious diseases such as influenza, herpes, hepatitis B, human immunodeficiency and papillomavirus, Hemophilus influenza, Mycobacterium tuberculosis and Bordetella pertussis, malarial plasmodia, Leishmania, Trypanosoma and Schistosoma. The immunomodulatory sequences are used to screen for human cimmunostimulatory activity by incubating macrophage cells and the cytokines in the supernatant. Sequences AAV80104 to AAV80116 represent coligonucleotides and the relative amount of Thi-biased cytokines in the supernatant. Sequences AAV80104 to AAV80116 represent coligonucleotides that were tested for immunostimulatory activity. These
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                                                              were used in experiments for the stimulation of cytokine production and were found to lack immunostimulatory activity. The invention provides specific claimed examples (AAV80096-103) of immunomodulatory sequences.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Immunostimulatory oligonucleotides regulate the immune system - and contain an immune-stimulating octanucleotide sequence; for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-059898/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dina D,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Immunostimulatory oligonucleotides regulate the immune system -contain an immune-stimulating octanucleotide sequence; for treat cancer, allergic and infectious diseases
Immunomodulatory; immunostimulatory; octanucleotide; immune regulation; ISS: cancer; allergy; asthma; hepatitis B infection; papillomavirus; human immunodeficiency virus; influenza; herpes; M. tuberculosis; ss; B. pertussis; malaria; plasmodia; Leishmania; Trypanosoma; Schistosoma.
                                                                                                                                                                                                                                                                                                                                                                                           Sequence
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                                                                                Immunomodulatory oligo comprising an ISS sequence.
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                                                                       Immunomodulatory; immunostimulatory; octanucleotide; immune regulation; ISS: cancer; allergy; asthma; hepatitis B infection; papillomavirus; thuman immunodeficiency virus; influenza; herpes; M tuberculosis; ss; bunan immunodeficiency virus; influenza; herpes; M tuberculosis; ss; B. pertussis; malaria; plasmodia; Leishmania; Trypanosoma; Schistosoma.
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/note= "5-bromocytosine"
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 15-APR-1999;
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                                                                  26-OCT-2000.
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                                                                                                                                Synthetic
                                                                                                                                                               vaccine;
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CC (APC) with an immunostimulatory oligodeoxynucleotide (ISS-ODN). The APCs
CC thus treated have enhanced antigen presenting capabilities compared to
CC antigen-activated APCs. APCs with enhanced antigen presentation
CC capabilities then present the antigen to T-cells. The method is useful
CC for cancer immunotherapy. The ISS-ODN is used to enhance the tumour
CC antigen presenting capacity of tumour cells, thereby inducing T-cell
CC curvation, and is therefore useful for treating tumours. Additionally,
CC tumour cells treated with an ISS-ODN ex vivo are useful as vaccines.
CC ISS-ODN treated APCs are induced to take up antigen through upregulation of
CC major histocompatibility complex (MHC) Class I and II expression and
CC contact of APC with antigen through upregulation of
CC movide cell-to-cell adhesion through upregulation of intercellular
CC adhesion molecule (ICAM) expression, and to increase Th1 stimulatory
CC cytokine production, all at levels greater than that achieved through
CC contact of APC with antigen alone. The present sequence represents
CC invention.
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             glioblastoma;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 22
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                                                                                                                                                                          19-MAR-1999;
                                                                                                                                                                                                                                                                                         28-SEP-2000
                                                                                                                                                                                                                                                                                                                                               WO200056342-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Antitumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAA96253 standard;
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                                                                                   (ASSI-)
                                                                                                                                                                                                                             17-MAR-2000; 2000WO-FR00676
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                                                                                   ASSISTANCE PUBLIQUE HOPITAUX PARIS. INST NAT SANTE & RECH MEDICALE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  UNIV CALIFORNIA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           immunostimulatory oligonucleotide; tumour; anaplasia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a stabilised oligonucleotide with antitumour activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 6 A; 3 C; 7 G; 6 T; 0 other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                medullablastoma; neuroblastoma; melanoma;
                                                                                                                                                                       99FR-0003433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 15;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
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19;
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RESULT 15
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                                                                                                                                          O'Hagan D,
Barackman J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence represents a stabilised oligonucleotide which has antitumour activity. The oligonucleotide comprises an octomer motif of the type 5'-purine-Cg-pyrimidine-pyrimidine-X-3', where the pair X-X is AT, AA, CT or TT. The oligonucleotides are immunostimulatory, and are not toxic. They may be adapted for use in animals or humans. The stabilised oligonucleotides are used for treating tumours, of any type and any degree of anaplasia, particularly human tumours in the peripheral or central nervous systems, specifically glioblastomas, medullablastomas, neuroblastomas, melanomas or carcinomas.
                                                                                                                                                                                                                                                                                                                                                                                                     CpG oligonucleotide; CpG motif; adjuvant; microdroplet emulsion; microemulsion; adsorbent microparticle; vaccine; Th1 immune response; viral infection; bacterial infection; parasitic infection; HCV; HBV; hepatitis C virus; hepatitis B virus; herpes simplex virus; HSV; HIV; human immunodeficiency virus; cytomegalovirus; CMV; influenza virus; rabies virus; cholera; diphtheria; tetanus; pertussis;
                                       emulsion consisting of a metabo which is a detergent, useful as and parasitic infection -
                                                       Microemulsion having an adsorbent surface comprising a microdi
emulsion consisting of a metabolizable oil and an emulsifying
which is a detergent, useful as a vaccine to treat bacterial,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 2; Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Use of stabilized oligonucleotides as antitumor agents, particularly against nervous system tumors, have optimal activity and are not tox
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-602192/57.
                                                                                                               WPI; 2000-587123/55
                                                                                                                                                                                                                 29-JUL-1999;
28-OCT-1999;
                                                                                                                                                                                                                                                                          09-FEB-2000; 2000WO-US03331
                                                                                                                                                                                                                                                                                                                                   WO200050006-A2
                                                                                                                                                                                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                                                                                                                                                                                           Helicobacter pylori; Haemophilus influenzae; malaria; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA90458;
                                                                                                                                                                                                                                             26-FEB-1999;
                                                                                                                                                                                      (CHIR ) CHIRON CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            adjuvant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            oligonucleotide,
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                                                                                                                                                                                                                 99US-0146391.
99US-0161997.
                                                                                                                                                                                                                                             99US-0121858.
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                                                                                                                                                         Donnelly
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Pred. No. 19;
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                                                                                                                                                         Kazzaz J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21;
                                                                                                                                                        Ugozzoli M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22;
                                                                                    microdroplet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           are not toxic
                                                                                                                                                         Singh
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17;

Page 40; 95pp; English

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RESULT 16
AAA14467
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Best Local Similarity
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                            Immunostimulatory oligonucleotide adjuvant induces mucosal immunity an antigen in a mammalian host through production of secretory
                                                                                                                                                                                                    Raz E,
                                                                                                                                                                                                                                                                                                                                          05-OCT-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Immunostimulatory oligonucleotide; adjuvant; mucosal immunity; secretory immunoglobulin A production; sIgA; Th1 phenotype; ds
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 22
an antigen in a mammalian host through immunoglobulin A -
                                                                                                                                                                                                                                                                                                                                                                                                             15-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Immunostimulatory oligonucleotide (ISS-ODN) DY1018.
                                                                                                                                                                                                                                                                    (REGC ) UNIV CALIFORNIA.
                                                                                                                                     2000-303647/26.
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                                                                                                                                                                                                    Horner AA, Carson
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                                                                                                                                                                                                    DA.
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The invention relates to a method of inducing mucosal immunity to

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Claim 3; Page 16; 65pp; English

Claim 8; Page 21; 64pp; English.

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RESULT 17
AAA38065
ID AAA38
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CC immunoglobulin A (61gA). Immune protection in the mucosa (the principal CC site of entry of most foreign antigens) is mediated by mucosa-associated lymphoid tissue, epithelial and distinct B-cell, T-cell and accessory CC cell sub-populations. The primary immune response which characterises CC the induction of mucosal immunity to an antigen is sIgA production by C activated B-cells. The method comprises introducing an immunostimulatory CC oligonucleotide (ISS-ODN) and the antigen into bost mucosa, where the CC sequence is 5'-purine-Cultide sequence. The core nucleotide cexample of which are AACGTT, AGCGTC and GACGTT (SEQ ID NOS 1-3). A CC specific example of an ISS-ODN is DY1018 (AAA14467). The ISS-ODN is used Cas an adjuvant with an antigen for stimulating mucosal immunity. The C antigen alone into the mucosal into the host is at least 3 times the CC antigen alone into the mucosal tissue and is equivalent or greater than C the magnitude of sIgA production achievable in response to introduction of the antigen and cholera toxin adjuvant into the mucosal tissue. The cost immune response is stimulated to antigen specific IgA production, C biased towards the Thi phenotype while antigen-induced IgA production, C biased towards the Thi phenotype while antigen-induced IgA production, C constituted than the cost of the salivant thas little or no known toxicity in mammals and its efficacy is comparable to that of cholera toxin which is used as a C mucosal adjuvant. The present sequence represents the immunostimulatory older of the mucosal tissue and its collection which mucosal tissue and its collection which is used as a control of the mucosal tissue.
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Best Local S
Matches 15
                                                     Anti-HIV composition comprises immunostimulatory polynucleotides and HIV glycoprotein gp120 useful for modulating, stimulating an immune response against HIV in an HIV infected individual
                                                                                                                                                                                                                                                       09-OCT-1998;
07-OCT-1999;
                                                                                                                                                                                                                                                                                                                  08-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Immunostimulatory sequence; ISS; immunomodulator; glycoprotein 120;
gp120; human immunodeficiency virus; HIV; immune response; infectic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAA38065 standard; DNA; 22 BP
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                                                                                                                                     WPI; 2000-317846/27.
                                                                                                                                                                        Tighe H,
                                                                                                                                                                                                                                                                                                                                                                                               WO200021556-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           development;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Immunostimulatory sequence (ISS) #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               oligonucleotide DY1018.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antigen in a mammalian host, including the the production of secretory immunoglobulin A (sIgA). Immune protection in the mucosa (the principation)
                                                                                                                                                                                                                  (DYNA-) DYNAVAX TECHNOLOGIES CORP
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                                                                                                                                                                            Schwartz D,
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The present invention relates to an immunostimulatory composition comprising a human immunodeficiency virus (HTV) antigen, and an immunomodulatory polynucleotide comprising an immunostimulatory sequence (ISS). This sequence represents an ISS that can be used in the composition. An immunostimulatory composition which comprises a gpi20 conjugated to an immunomodulatory polynucleotide, or is proximately associated to it and not conjugated, is used for modulating or stimulating a specific immune response against gpi20 in an individual by producing anti-gpi20 antibodies or gpi20 specific cytotoxic T cells. It is also used for suppressing or delaying development of HIV infection in an individual infected with HIV or an individual at risk of infection
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                                                                                                                                                                                                                                                                                                                                                                               Anti-HIV composition comprises immunostimulatory polynucleotides and HIV glycoprotein gp120 useful for modulating, stimulating an immune response against HIV in an HIV infected individual
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07-OCT-1999;
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                                                                                                                                                                                                                                                                                                                              Disclosure;
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gp120; human immunodeficiency virus; HIV; immune response; infection;
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                   immunomodulatory polynucleotide comprising an immunostimulatory sequence (ISS). This sequence represents an ISS that can be used in the composition. An immunostimulatory composition which comprises a gpl20 conjugated to an immunomodulatory polynucleotide, or is proximately associated to it and not conjugated, is used for modulating or stimulating a specific immune response against gpl20 in an individual by producing anti-gpl20 antibodies or gpl20 specific cytotoxic T cells. It is also used for suppressing or delaying development of HIV infection in an individual infected with HIV or an individual at risk of infection with HIV, respectively. It is also used for treating an individual infected with HIV in need of immune modulation.
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gp120; human immunodeficiency virus; HIV; immune response; infectio
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                                                                                                                                                                            comprising a human immunodeficiency virus (HIV) antigen,
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against HIV in an HIV
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/mod_base= OTHER
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Sequence 22
                                                                                                                                         The present invention relates to an immunostimulatory composition comprising a human immunodeficiency virus (HIV) antigen, and an immunomodulatory polynucleotide comprising an immunostimulatory sequence (ISS). This sequence represents an ISS that can be used in the
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gp120; human immunodeficiency virus; HIV; immune response; infection;
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                          with HIV in need of immune modulation.
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BP; 6 A; 3 C; 7 G; 6 T; 0 other;
                                                                                                                                                                                                            Page 17; 65pp;
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99US-0415186.
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'mod_base= OTHER
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                                                                                                                                                                                                                                                                                                                     Schwartz D,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "5-Bromocytosine"
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                                                                                                                                                                                                                                                                                                                     Takabayashi
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Query Match

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DB 21;

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RESULT 21
AAZ55876
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    X 2 X 2 X 2 R
                                                      Sequences AAZ55876-255877 and AAZ55880-Z55886 represent immunomodulatory CC oligonucleotides comprising an immunostimulatory sequence (ISS, e.g., AACGTC, AACGTTC, AGCGTT, AGCGTT, GACGTT, GACGTT, GACGTT, GACGTT, GACGTT, AGCGTT, AGCGTT, GACGTT, GACGTT, GACGTTC and GACGTTCC). The invention relates to oligonucleotides CC comprising one or more ISSs, where the ISS comprises at least cone modified cytosine with an electron-withdrawing moiety at contain ISSs comprising at least one bromocytosine, whereas sequence CC contain ISSs comprising at least one bromocytosine, whereas sequence CC contain ISSs comprising at least one bromocytosine, whereas sequence CC AAZ55876 contains an unmodified ISS. The immunomodulatory cytokines, and induce a Thi-type immune response (activation of Thi-type cytokines, and induce a Thi-type immune response (activation of cytotoxic T cells), while simultaneously downregulating the Th2-type response. The Th1 Cresponse is particularly effective for control of viruses and controllarly when formulated with an antigen or a facilitator, for modulating immune responses. Such compositions may be used in tumour therefore intercry in transference of allerny including asthmal for inducing a sthmal for in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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therapy, in treatment of allergy (including asthma), vigorous cellular response (against a virus, bacterion protozoan), and also in contraceptive vaccines based
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1; Page 35; 54pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel immunomodulatory oligonucleotide used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-105687/09
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   response, e.g. to tumor antigens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Immunomodulation; immunostimulatory sequence; adjuvant;
Th1 immune response; cytotoxic T-cell; cytokine; cancer; allergy;
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99US-0324191.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            to induce a Th1-type immune
                        bacterium,
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                                          for inducing a
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RESULT 22
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                                                                                                                                             polynucleotides which may be used to ameliorate inflammation of the gastrointestinal tract by administering a nucleic acid comprising one of these sequences. These polynucleotides all comprise an immunomodulatory nucleotide sequence of 5 °CpG-3 (I). The incleotides may be used for ameliorating or reducing gastrointestinal inflammation e.g. chronic or acute gastrointestinal inflammation e.g. chronic or acute gastrointestinal inflammation e.g. chronic or acute gastrointestinal inflammation, ulcerative colitis, Crohn's disease caused by inflammatory bowel disease; diarrhoea, rectal bleeding, weight loss; to reduce colon weight and colon lesions; to reduce a colonic inflammation. The immunomodulatory polynucleotides treat inflammatory bowel disease satisfactorily and effectively and have little or no toxicity even at a high dosage of 50000 micro-g. They also reduce the risk of
                                                                                                                                                                                                                                                                                                                  The
                                                                                                                                                                                                                                                                                                                                                                                                                WPI;
                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                              Claim 7;
                                                                                                                                                                                                                                                                                                                                                                      Ameliorating gastrointestinal inflammation e.g. inflammator disease involves administering an immunomodulatory nucleic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ulcerative colitis; Crohn's disease; inflammatory bowel disease; diarrhoea; rectal bleeding; weight loss; colon; weight; lesion; ss.
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                                                                                                                                     cancer
                    GAACGTTCGAGATGA
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GAACGTTCGAGATGA 22
                                                                                                                                                                                                                                                                                                                                              Page 28; 58pp; English.
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                                                     Conservative
                                                                                                        BP; 6 A; 3 C; 7 G; 6 T; 0 other;
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                                                                                                                                                                                                                                                                                                                  given in AAH43338-48 represent immunomodulatory
                                                                                                                                   by treating ulcerative colitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                inflammation; gastrointestinal tract;
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                                                             71.4%;
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19;
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                                                                                                                                                                                                                                                                                                                                                                                    inflammatory bowel
                                                                           Length 22;
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RESULT 23
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                                                                                                                                                                                                  The invention is used to prevent and treat respiratory syncytial virus infection of the lower respiratory tract and other viruses including influenza virus, rhinovirus, adenovirus, measles virus, muvirus, parainfluenza virus, rubella virus, poxvirus, parvovirus, hantavirus and varicella virus. A kit for carrying out the administration is also included. Unlike the prior art antiviral
                                                                                                                                                                                                                                                                                     The invention relates to suppressing a respiratory syncytial virus (RSV) infection in an exposed individual, comprising administering a polynucleotide comprising an immunostimulatory sequence (ISS) comprising the sequence (ISS) where an RSV antigen is not administered.
                                                                                                                                                                                                                                                                                                                                                                                         Suppressing a respiratory syncytial virus infection by administering immunostimulatory sequence at the site of infection is useful to prevent and treat lower respiratory tract viral infections -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-MAR-2000;
09-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Immunostimulatory sequence; ISS; ds; antiviral; immunogen; respiratory syncytial virus; RSV; influenza virus; rhinovirus; adenovirus; measles virus; mumps virus; parainfluenza virus; rubella virus; poxvirus; parvovirus; hantavirus; varicella virus.
                                                                                                                Sequence
                                                                                                                                          ribavirin, which is a potential teratogen, the invention provides a treatment which does not carry unacceptable side effects. Other prid medicaments treat the symptoms only, whilst the invention treats the infection. The present sequence is an ISS of the invention.
                                                                                                                                                                                                                                                                                                                                                                  Claim
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                                                                     Similarity
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                            GAACGTTCGAGATGA
                                                                                                                22 BP; 6 A; 3 C; 7 G; 6 T; 0 other;
                                                        Conservative
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2001US-0802686.
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Pred. No. 19;
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                                                                                 DB 22;
                                                        0,
                                                                                 Length 22;
                                                        Indels
                                                                                                                                                                        Other prior art
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RESULT 24 AAS14665

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RESULT 25
AAH75992
ID AAH75
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AC AAH75
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AC AAH75
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AC IS-NC
XX
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DI IS-NC
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DE Immun
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                                                                                                                                                                                                                                                                                                                 Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                       The invention relates to suppressing a respiratory syncytial virus (RSV) infection in an exposed individual, comprising administering a polynucleotide comprising an immunostimulatory sequence (ISS) comprising the sequence 5'-C, G-3', where an RSV antigen is not administered. The invention is used to prevent and treat respiratory syncytial virus infection of the lower respiratory tract and other viruses including influenza virus, rhinovirus, adenovirus, measles virus, virus, parainfluenza virus, rubella virus, poxvirus, parvovirus, hantavirus and varicella virus. A kit for carrying out the administration is also included. Unlike the prior art antiviral agent ribavirin, which is a potential teratogen, the invention provides a treatment which does not carry unacceptable side effects. Other prior art medicaments treat the symptoms only, whilst the invention treats the infection. The present sequence is an ISS of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Suppressing a respiratory syncytial virus infection by administering immunostimulatory sequence at the site of infection is useful to prevent and treat lower respiratory tract viral infections
              Immunomodulatory oligonucleotide
                                               15-NOV-2001
                                                                                                         AAH75992 standard; DNA; 22 BP
                                                                                                                                                                                                                                                                                                              Sequence 22 BP; 6 A; 4 C; 7 G; 5 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 15; 40pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-607438/69
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-MAR-2000;
09-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Respiratory syncytial virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            respiratory syncytial virus; RSV; influenza virus; rhinovirus; adenovirus; measles virus; mumps virus; parainfluenza virus; rubella virus; parvovirus; hantavirus; varicella virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Immunostimulatory sequence; ISS; ds;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-DEC-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Immunostimulatory sequence,
                                                                                                                                                                                                                                                                  Local
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                                                                                                                                                                                                      6 GAACGTTCGAGATGA 20
                                                                                                                                                                                                                                                  l Similarity
15; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DYNAVAX TECHNOLOGIES CORP.
                                                                                                                                                                                      GAACGITCGAGAIGA 22
                                                                                                                                                                                                                                                  Conservative 0; Mismatches
                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-188583P.
2001US-0802686.
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                                                                                                                                                                                                                                                                                 71.4%;
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                                                                                                                                                                                                                                                                  Score 15;
Pred. No.
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RESULT 26
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Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                               microcarrier complexes. The complexes comprise an immunostimulatory sequence (ISS), e.g. the present sequence, linked to a nonbiodegradable microcarrier provided that if the microcarrier is gold, latex or magnetic then the linkage is not biotin/avidin. The complex is useful for modulating an immune response (especially stimulating a Thi-type response or suppressing a Thi-type response), increasing interferon-gamma (especially in a patient suffering from idiopathic pulmonary fibrosis), increasing interferon-alpha (especially in patients suffering from viral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Immunomodulatory; immunostimulatory; Th1-type immune response; Th2-type immune response; interferon; idiopathic pulmonary fibrosis; viral infection; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                        Synthetic
                                                                   Th2-type immune viral infection;
                                                                                                                                                      15-NOV-2001
                                                                                                                                                                                                          AAH75993 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to immunomodulatory polynucleotide/microcarrier complexes. The complexes comprise an immunostimulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 11; Page 49; 61pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Immunomodulatory polynucleotide/microcarrier complexes comprise an
immunostimulatory sequence containing polynucleotide linked to a
nonbiodegradable microcarrier -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Van Nest G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-MAR-2000;
09-MAR-2001;
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                                                                                Immunomodulatory; immunostimulatory; Th1-type immune response;
Th2-type immune response; interferon; idiopathic pulmonary fibrosis;
                                                                                                                         Immunomodulatory oligonucleotide #2
                                                                                                                                                                                                                                                                                                                                                                                                                     infection) and reducing levels of IgE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-MAR-2001; 2001WO-US07843.
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2001US-0802376.
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/mod_base=
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                                                                                                                                                                                                                                                                                                                                                                                            3 C; 7 G; 6 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                  71.4%; Score 15; 100.0%; Pred. No.
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WO200168143-A2

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RESULT 27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            microcarrier complexes. The complexes comprise an immunostimulatory sequence (ISS), e.g. the present sequence, linked to a nonbiodegradable microcarrier provided that if the microcarrier is gold, latex or magnetic then the linkage is not biotin/avidin. The complex is useful for modulating an immune response (especially stimulating a Th1-type response
Reducing risk of anaphylactic hypersensitivity response to in a subject, by administering an immunomodulating nucleic molecule comprising a specific sequence -
                                                    WPI; 2001-475812/51.
                                                                             Raz
                                                                                                                             21-DEC-1999;
                                                                                                                                                     20-DEC-2000; 2000WO-US35064.
                                                                                                                                                                                 28-JUN-2001
                                                                                                                                                                                                        WO200145750-A1
                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                       Anaphylactic hypersensitivity; i anaphylaxis-associated symptom;
                                                                                                                                                                                                                                                                                            Phosphorothioate
                                                                                                                                                                                                                                                                                                                      01-OCT-2001
                                                                                                                                                                                                                                                                                                                                               AAH42533;
                                                                                                                                                                                                                                                                                                                                                                       AAH42533 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            or suppressing a Th2-type response), increasing interferon-gamma (especially in a patient suffering from idiopathic pulmonary fibrosis), increasing interferon-alpha (especially in patients suffering from viral infection) and reducing levels of IgE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 18; 61pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Immunomodulatory polynucleotide/microcarrier complexes comprise an immunostimulatory sequence containing polynucleotide linked to a nonbiodegradable microcarrier -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Van
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                                                                                                      (REGC ) UNIV CALIFORNIA.
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                                                                             'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 present invention relates to immunomodulatory polynucleotide/rocarrier complexes. The complexes comprise an immunostimulatory
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15; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 6 A; 4 C; 7 G; 5 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tuck
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-0188557.
2001US-0802376.
                                                                                                                                                                                                                                                                                                                     (first entry)
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                                                                                                                               9905-0171830
                                                                                                                                                                                                                                                                                           beta-gal/immunostimulatory oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ß
                                                                                                                                                                                                                                                                                                                                                                       DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             71.4%;
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                                                                                                                                                                                                                                                                      immunomodulatory
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                                                                                                                                                                                                                                                       phosphorothioate; ss
                                                                                                                                                                                                                                                                      nucleic acid; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 22;
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             an allergen
acid
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RESULT 28
AAH73439
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Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          with anaphylactic hypersensitivity or risk of anaphylactic response is a subject. The method comprises administering to an individual a nucleic acid molecule comprising an immunomodulatory nucleic acid molecule (INA) comprising the sequence 5.-C-G-3 to reduce anaphylaxis-associated symptom. The method is useful for reducing a symptom associated with anaphylactic hypersensitivity, including elevated IgE level, elevated histamine level, constriction of the alrways and difficult breathing which can lead to anaphylactic reaction anaphylactic shock, thereby reducing the risk of death. The present sequence represents a beta-gal/immunostimulatory sequence, which was used as vaccine to protect against the development of anaphylactic breathing which the development of anaphylactic
                                         The present invention describes a method of treating an infection caused by an intracellular pathogen, involving administering to the patient an immunomodulatory nucleic acid and an anti-pathogenic agent. This is particularly useful in the treatment of mycobacterial infections. The present sequence is an immunomodulatory nucleic acid described in the
Sequence
                                                                                                                                                                     Treating infection of intracellular pathogen e.g., Mycobacterium, in a subject, involves administering immunomodulatory nucleic acid molecule to inhibit intracellular replication of intracellular pathogen -
                                                                                                                                                                                                                                                               Raz
                                                                                                                                                                                                                                                                                                                        31-JAN-2000; 2000US-0179353
                                                                                                                                                                                                                                                                                                                                                      30-JAN-2001; 2001WO-US03029.
                                                                                                                                                                                                                                                                                                                                                                                      02-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            G3PDH gene; immunomodulatory oligonucleotide; infection; mycobacterium; intracellular pathogen; anti-pathogenic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAH73439 standard;
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                              exemplification
                                                                                                                                      Examples; Page 26; 54pp; English.
                                                                                                                                                                                                                                 WPI; 2001-483234/52.
                                                                                                                                                                                                                                                                                                                                                                                                                  WO200155341-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Immunomodulatory nucleic acid.
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                                                                                                                                                                                                                                                                                             (REGC )
                                                                                                                                                                                                                                                               Έ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       specification describes a method for reducing a symptom associated
anaphylactic hypersensitivity or risk of anaphylactic response in
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 22
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 B₽;
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                               the
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3 C; 7
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                                                                                                                                                                                                                                                               Catanzaro A,
                               invention.
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 G; 6 T; 0 other;
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Pred. No.
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Query Match

71

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Score

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22;

Length

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RESULT 29
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The present invention describes a composition (I) for intracellular delivery of a protein, comprising a protein in operative association with a cationic intracellular delivery vehicle comprising a cationic composition, where the intracellular delivery vehicle is adapted to fuse with a call membrane, therefore effecting intracellular delivery of the associated protein. Also described is a method for delivering a protein composition and providing the protein associated with a cationic composition, and contacting the delivery composition with a cell composition, and contacting the delivery composition with a cell composition, and contacting the delivery composition with a cell composition as cell, such that the cationic lipid forms an association composition are cell in the preparation of a medicament for intracellular delivery of the cetting in the protein into the cell. (I) is useful in the preparation of a medicament for intracellular delivery of a therapeutic or prophylactic protein. (I) is useful for delivering continuous therapeutically useful, proteins, peptides or small continuous therapeutically useful, proteins, peptides or small continuous therapeutically useful, proteins, peptides or small continuous and contracellular proteins to neutralise their activity, and to intracellular suseful for the in vitro or in vivo delivery of antibodies or peptides which block the function of specific intracellular
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Composition useful for intracellular delivery of a protein, comprises a protein in operative association with a cationic intracellular delivery vehicle comprising a cationic lipid, which is adapted to fuse with a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 3; Page 18; 33pp; English.
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RESULT 30
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Best Local
The present invention describes immunomodulatory populations ((I) and (II)) of conjugate molecules (CMs) comprising immunostimulatory sequences (ISS) of polymulectides and antigens. The extent of conjugation affects the immunological properties (e.g. the extent of antigen-specific antibody formation, including Th1-associated antibody formation) so the conjugates are used for altering the type and extent of immune response. (I) and (II) have immunomodulatory, immunosuppressive and antiallergic activities, and can be used in the modulation of immune responses via the stimulation of Th1 lymphocytes and Th1-associated cytokines, and suppression of Th2 lymphocytes and Th1-associated cytokines, and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of Th2 lymphocytes and suppression of II lymphocytes and suppression of 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    controlling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Populations of conjugate molecules comprising polynucleotide immunostimulatory sequences polynucleotides and antigens, useful for
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RESULT 31
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                                                                                              the immunological properties (e.g. the extent of antigen-specific antibody formation, including Thi-associated antibody formation) so the conjugates are used for altering the type and extent of immune response. (I) and (II) have immunomodulatory, immunosuppressive and antiallergic activities, and can be used in the modulation of immune responses via the stimulation of Thi lymphocytes and Thi-associated cytokines, and suppression of Thi lymphocytes and cytokines. The populations (II) and (III) of conjugate molecules may be used for modulating immune responses in individuals e.g. for the treatment of an allergic condition. (I) and the used to modulate immune responses and therefore prevent potentially harmful reactions to antigens. The present sequence represents an ISS polynucleotide which is used in the exemplification of the present sequence of the present sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              represents an ISS polynucleotide which is used in the exemplification of the present invention.
                                                           Sequence 22
                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 30; 97pp; English
                                                                                                                                                                                                                                                                                                                                                                    controlling
                                                                                                                                                                                                                                                                                                                                                                                Populations of conjugate molecules comprising polynucleotide immunostimulatory sequences polynucleotides and antigens, us
                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-329209/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tuck S,
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14-NOV-2000; 2000US-0713136.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Immunostimulatory sequence; ISS; immunomodulatory; immune response;
antigen; antiallergic; modulation; Th1 lymphocyte stimulation; alle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-AUG-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Immunostimulatory sequence
                                                                                                                                                                                                                                                                            (II)) of conjugate molecules (CMs) comprising immunostimulatory sequence (ISS) of polynuclectides and antigens. The extent of conjugation affects
                  Local
                                                                                                                                                                                                                                                                                                          present invention describes immunomodulatory populations ((I) and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15;
 l Similarity
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   Conservative
                                                           BP; 6 A; 4 C; 7 G; 5 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                     immune responses
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                Score 15;
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                              Length 22;
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RESULT 32
AAH20403
ID AAH20
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                                             CO Unmethylated CG dinucleotide sequences are commonly found in bacterial CC DNA, and have been found to stimulate the innate immune system. Natural CC killer and T cells are activated by exposure to oligonucleotides CC containing Cpg motifs. Oligonucleotides containing Cpg motifs. Oligonucleotides containing Cpg motifs can be used CC receptor. The Cpg receptor contains a Toll homology domain (THD). The CC receptor family are associated with responses to pathogens. Cpg CC oligonucleotides may act as stimulators of various immune responses. The Cc Cpg receptor or cells expressing the receptor are useful for identifying CC a compound which binds to or modulates an activity of the Cpg receptor. CC The compounds are useful in e.g. vaccine adjuvants promoting CC ell-mediated immune responses, antibacterials, (e.g. protection from CC interial infection), tumour immunotherapy, allergy treatment, (e.g. suppressing IgE in human PBMC, shifting from Th2 to Th1) and as anti-inflammatory agents (e.g. for use in cystic fibrosis, sepsis, heart Cdisease, chlamydia, inflammatory bowel disease, arthritis and multiple CC sclerosis). The present sequence represents a CpG motif containing CC conjagonucleotide used in examples demonstrating that CpG oligonucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel CpG receptor and nucleic acid molecule encoding the receptor, for modulating immune response and for identifying compounds of therapeutic use which bind and/or modulate the activity of the receptor \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Immune system stimulator; CpG motif; CpG receptor; CpG-R; antibacterial; immune response; vaccine adjuvant; tumour fumunotherapy; allergy; anti-inflammatory; cystic fibrosis; sepsis; heart disease; chlamydia; inflammatory bowel disease; arthritis; multiple sclerosis; ss.
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-343486/36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mackichan ML;
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24-NOV-1999;
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                                   activate the MAPK pathways and NF-kappaB
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99US-0167389.
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A; 3 C; 7 G; 6 T; 0 other;
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Query Match

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RESULT 34
AAF77041
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AAAP77040
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XX MOCULL
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Best Local Similarity
Matches 15; Conserv
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    WO200112223-A2
                                            Synthetic
                                                                                Modulate;
                                                                                                                             Immunostimulatory DNA #1.
                                                                                                                                                                   15-MAY-2001
                                                                                                                                                                                                          AAF77041;
                                                                                                                                                                                                                                                  AAF77041 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 22 BP; 6 A; 3 C; 7 G; 6 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to modulating an immune response to second antigen in an individual, involving a daministering to the individual an immunemodulatory polynucleotide comprising an immunostimulatory sequence (ISS) and a first antigen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 31; Page 15; 63pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Modulating immune response to a second antigen in humans involve administering an immunostimulatory polynucleotide comprising an immunostimulatory sequence and a first antigen -
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                                                                                  immune;
                                                                                                                                                                                                                                                                                                                                                                                                                            71.4%; Score 15; ilarity 100.0%; Pred. No. Conservative 0; Mismatc
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                                                                                  antigen;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Immunostimulatory nucleotide sequence; antibody production; IFNgamma release; infection; allergy; ds.
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The present invention describes a method for enhancing an immune response to a substance, comprising administering an immunostimulatory nucleotide
                                                                                                 Enhancing immune response against pathogen or antigen associated with infectious diseases, an allergen or cancer, involves administering immunostimulatory nucleotide sequence prior to antigen exposure -
                                                                                                                                                                                                                                                                                                                                                    30-JUN-2000; 2000WO-US18229.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unidentified.
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                                                             Example 1; Page 14; 47pp; English
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                                                                                                                                    This invention describes a novel immunogenic composition (I), comprising a whole-killed human immunodeficiency virus (HIV) devoid of outer envelope protein gpl20, an isolated nucleic acid molecule containing an immunostimulatory sequence (ISS) and an adjuvant, which enhances beta-chemokine levels in a mammal. The products of the invention have anti-HIV activity. (I) is useful for immunizing and for inhibiting AIDS in a mammal. The mammal can be apprented such as a human, (HIV seronegative or seropositive humans) or a rodent, in particular the primate is a pregnant mother or an infant. (I) can induce potent Thi immune responses against a broad spectrum of HIV epitopes and provides a
                                                                                                 Sequence
                                                                                                                                                                                                                                                                                            Example I; Page 26; 64pp; English.
                                                                                                                                                                                                                                                                                                                     Human immunodeficiency virus (HIV) compositions useful for immunizing and inhibiting AIDS in mammals, comprises HIV devoid of outer envelope protein and an immunostimulatory nucleic acid sequence -
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                                                                                                                                                                                                                                                                                                                                                                                                            Moss RB
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25-AUG-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
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GAACGTTCGAGATGA
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                                                                                                                                                                                                                                                                                                                                                                        Immunogenic composition useful for stimulating an immune response in a mammal against Neisseria infection, comprises Neisseria antigen and an adjuvant composition comprising an oligonucleotide with a CG motif -
                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                               Claim 19; Page 9; 39pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Grandi G,
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                     the immune responsiveness of a mammalian host to a sensitizing antigen, and for treating a host suffering from inflammatory conditions such as asthma, nasal polyposis, allergic rinnitis, atopic dermatitis, allergic conjunctivitis, eosinophilic fasciitis, idiopathic hypereosinophilic syndrome, and cutaneous basophil hypersensitivity. The present sequence represents the nucleotide sequence of an immunomodulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Suppressing a symptom of an allergic response in a subject, useful for preventing inflammation associated with allergy, comprises administering to an antigen-sensitized host first and second doses of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI;
                    25-NOV-2002
                                                       ABQ78627;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Immunomodulator; immunostimulant; antiinflammatory; antiasthmatic;
antiallergic; dermatological; vaccine; gene therapy; immune respon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleotide sequence of an immunostimulatory oligonucleotide ISS-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-JAN-2003
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                                                                                                                                                                                GAACGTTCGAGATGA 22
                                                                                                                                                                                                           GAACGTTCGAGATGA 20
                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                      BP; 6 A; 3 C; 7
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                  (first entry)
                                                                                        DNA; 22
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; Pred. No. 19;
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RESULT 40
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Best Local S
Matches 15
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                                                             Vaccine; immune response; microparticle; ds; adsorbent surface; poly(alpha-hydroxy acid); polyhydroxy butyric acid; polycaprolact polyorthoester; polycyanoacrylate; detergent; submicron emulsion; viral infection; bacterial infection; parasitic infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Treating an HIV-infected individual comprises treatment with anti-retroviral compound and immunization with an HIV immunogenic composition with structured cycles of anti-retroviral treatment and
                                                                                                                                                   CpG motif oligonucleotide #12.
                                                                                                                                                                                    08-NOV-2002
                                                                                                                                                                                                                                                   AAL44504 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          method is useful
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                withdrawal from treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-643331/69
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HIV; beta-chemokine; immunisation; AIDS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ISS enhancing HIV-specific
                                                                                                                                                                                                                                                                                                                                                                                                        15;
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                                                                                                                                                                                                                                                                                                                                         GAACGTTCGAGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22 BP; 6 A; 3 C; 7 G; 6 T; 0 other;
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                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        for treating an HIV-infected
                                                                                                                                                                                                                                                                                                                                                                                                                        71.4%; Score 15; 100.0%; Pred. No.
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                                                                                                  polycaprolactone;
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Unidentified

CpG oligonucleotide

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RESULT 41
ABQ75153
ID ABQ75
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Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    active macromolecule (e.g. a nucleic acid) has been adsorbed. The microparticle comprises a polymer microparticle of poly(alpha-hydroxy acid), a polyhydroxy butyric acid, a polycaprolactone, a polyorthoester, a polycyanoacrylate, a detergent, and submicron emulsion. The method/microparticle of the invention is useful for immunising a host animal against viral, bacterial or parasitic infections. The present DNA
                           04-JUL-2002
                                                                                                                                                                                    misc_RNA
                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                            Immunostimulatory sequence; ISS: immunomodulatory; immune response; allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; idiopathic pulmonary fibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; immunoglobulin B; IgE-related disorder; antiallergic; antiasthmatic; virucide; antibacterial; protozoacide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABQ75153 standard; DNA; 22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 46; 100pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A microparticle to which a biologically active macromolecule is adsorbed, for use as a vaccine composition to treat viral, bacterial parasitic infections, comprises a polymer microparticle, a detergent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-519084/55
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30-AUG-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ISS immunomodulatory oligonucleotide SEQ ID NO:2.
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T. Dubensky
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2001US-315905P
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/note= "uracil"
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100.0%; F1
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Pred. No.
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RESULT 42
ABQ75163
ID ABQ75
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CC comprising an immunostimulatory sequence (ISS). Also described: (I) an immunomodulatory composition comprising (I); (2) an immunomodulatory composition comprising (I); (2) an immunomodulatory composition comprising (I); (3) an immunomodulatory cobiodegradable MC, where the MC is less than 10 micrometre in size; and CC biodegradable MC, where the MC is less than 10 micrometre in size; and CC antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune creponse, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an CC ameliorating a symptom of an infectious disease caused by a cellular CC pathogen such as mycobacterial disease, malaria, leishmaniasis, contensis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an CC antender semigence represente an immunogradularory oligonucleoride which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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Best Local
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response, e.g. allergy, or
immunostimulatory sequence
                                                                                                                 Synthetic
                                                                                                                                                                                         Immunostimulatory sequence; ISS: immunomodulatory; immune response; allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; idiopathic pulmonary fibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
                                                                                                                                                                                                                                                                                                                                                                                                          ABQ75163 standard; DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Immunomodulatory polynucleotide for modulating an immune response in subject suffering from disorders associated with Th2-type immune response, e.g. allergy, or infectious disease, comprises an
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                                                                           WO200252002-A2
                                                                                                                                                     virucide; antibacterial; protozoacide; ss.
                                                                                                                                                                                                                                                                                         ISS immunomodulatory oligonucleotide SEQ ID NO:12.
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                                                                                                                                                                                                                                                                                                                                                                     ABQ75163;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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Pred. No. 19;
1; Mismatches
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27-DEC-2001; 2001WO-US50821.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMPMC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune (I)
                                                                                                                                                                         Immunostimulatory sequence; ISS: immunomodulatory; immune response; allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; allergy; asthmapianary fibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
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               27-DEC-2001; 2001WO-US50821.
                                                     04-JUL-2002
                                                                                                                                                               virucide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               present invention describes an immunomodulatory polynucleotide (I)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2002-657426/70
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                                                                                                                                                             antibacterial; protozoacide; ss.
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Matches 15
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                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                        virucide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                malaria;
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RESULT 45
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes an immunomodulatory polynucleotide (I) C comprising an immunostimulatory sequence (ISS). Also described: (1) and c immunomodulatory composition comprising (I); (2) an immunomodulatory c polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and CC discontible and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from discorders associated with a Th2-type immune cresponse, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an CC individual having a viral infectious disease caused by a cellular cameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunogulobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide from the control of the present sequence represents an immunomodulatory oligonucleotide from the control of the present sequence represents an immunomodulatory oligonucleotide from the control of the present sequence represents an immunomodulatory oligonucleotide from the control of the present sequence represents an immunomodulatory oligonucleotide from the control of the present sequence represents an immunomodulatory oligonucleotide from the control of the present sequence represents an immunomodulatory oligonucleotide from the control of the present sequence represents an immunomodulatory oligonucleotide from the control of the present sequence represents an immunomodulatory oligonucleotide from the control of the present sequence represents an immunomodulato
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                                                                                                                                        Synthetic.
                                                                                                                                                                                                           virucide;
                                                                                                                                                                                                                                                                                                              Immunostimulatory sequence; ISS: immunomodulatory; immune response; allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ISS immunomodulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABQ75211 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Immunomodulatory polynucleotide for modulating an immune response subject suffering from disorders associated with Th2-type immune response, e.g. allergy, or infectious disease, comprises an immunostimulatory sequence
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                             modified_base
                                                                                                                                                                                                                                                                                    malaria;
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14; Conserv
                                                                                                                                                                                                                                                                                 leishmaniasis; toxoplasmosis; schistosomiasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAACGITCGAGATGA 20
                                                                                                                                                                                                           vulin E; IgE-related disorder; antiallergic;
antibacterial; protozoacide; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     invention.
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                                    Location/Qualifiers
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA;
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93.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  oligonucleotide SEQ ID NO:45
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 24; Length 22; 19;
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RESULT 46
ABQ75212
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XX O5-NC
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KW aller
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention describes an immunomodulatory polynucleotide (I) CC comprising an immunostimulatory sequence (ISS). Also described: (1) an CC immunomodulatory composition comprising (I); (2) an immunomodulatory composition comprising (I); (2) an immunomodulatory CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and CC is lacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an CC individual suffering from disorders associated with a Th2-type immune CC response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an CC individual having a viral infectious disease, or IFN-alpha in an CC individual having a viral infectious disease caused by a cellular CC meliorating a symptom of an infectious disease caused by a cellular CC pathogen such as mycobacterial disease, malaria, leishmaniasis, controlled from the control of an immunoglobulin E (IgE) related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The
                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Immunomodulatory polynucleotide for modulating an immune response subject suffering from disorders associated with Th2-type immune response, e.g. allergy, or infectious disease, comprises an immunostimulatory sequence
Immunostimulatory sequence; ISS: immunomodulatory; immune response; allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; idiopathic pulmonary fibrosis; viral infection; mycobacterial disea
                                                                                                      05-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                           Sequence
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                                                                                                                                                                       ABQ75212
                                                                                                                                                                                                                                                                                                                                                                                                                                             present sequence represents an immunomodulatory oligonucleotide
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                                                                   ISS immunomodulatory oligonucleotide SEQ ID NO:46
                                                                                                                                                                                                                                                                                                                                          Local
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                                                                                                                                                                     standard; DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                invention.
                                                                                                    (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                           A; 2 C; 7 G; 6 T; 2 other;
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== "5-bromocytosine"
                                                                                                                                                                                                                                                                                                                                        71.4%; Score 15; DB 100.0%; Pred. No. 19;
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RESULT 47
ABQ75259
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Best Local
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                   05-NOV-2002
                                                                ABQ75259;
                                                                                                           ABQ75259 standard; DNA; 22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 22; 95pp; English.
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15; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            invention.
                                                                                                                                                                                                                                                                                                                  conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                            BP; 5
                (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                          A; 3 C; 7
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                                                                                                                                                                                                                                                                                                                                                                 71.4%;
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%; Pred. No. 19;
0; Mismatches
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Immunostimulatory sequence; ISS: immunomodulatory; immune
                                                                                                                         ISS immunomodulatory positive control oligonucleotide
                                                                                                                          SEQ
                                                                                                                     response;
                                                                                                                          ID NO:59.
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virucide; antibacterial; protozoacide; malaria; allergy; immunoglobulin diopathic asthma; infectious leishmaniasis; sthma; infectious disease; interferon-gamma; IFN-gamma; pulmonary fibrosis; viral infection; mycobacterial disease; eishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; E; IgE-related disorder; antiallergic; antiasthmatic;

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27-DEC-2001; 2001WO-US50821

27-DEC-2000; 2000US-258675P

(DYNA-) DYNAVAX TECHNOLOGIES CORP

Fearon KL,

WPI; 2002-657426/70.

Immunomodulatory polynucleotide for modulating an immune response subject suffering from disorders associated with Th2-type immune response, e.g. allergy, or infectious disease, comprises an immunostimulatory sequence

Example 1; Page 71; 95pp; English.

The present invention describes an immunomodulatory polynucleotide (I) CC comprising an immunostimulatory sequence (ISS). Also described: (1) and comprising an immunomodulatory sequence (ISS). Also described: (1) and cc immunomodulatory composition comprising (I); (2) an immunomodulatory cc polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and cc is described; (I) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an cc individual suffering from disorders associated with a Th2-type immune cresponse, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an conditional having a viral infectious fibrosis, or IFN-alpha in an conditional having a viral infectious disease caused by a cellular conditional having a viral infectious disease caused by a cellular conditional manning immunoglobulin B (IgB)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immuhich was used in an example from immunomodulatory related oligonucleotide the present invention

Sequence 22 BP; 6 A; 3 C; 7 G; 6 T; 0 other;

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문
                           Matches
                                         Query Match
в
             6 GAACGITCGAGATGA 20
                                   Similarity
                           Conservative
                                  71.4%;
22
                                  Score 15; pred. No.
                           0
                            Mismatches
                                   19;
                                         DB 24;
                           <u>,,</u>
                                         Length 22;
                           Indels
                           0
                           Gaps
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0

RESULT 48 AAD24885

AAD24885 standard; DNA; 22

BXSXEXE 12-MAR-2002 (first entry

Immunostimulatory oligodeoxynucleotide (ISS-ODN)

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RESULT 49
AAS16337
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                                                                                                                                                                                                                                                                                                                               The invention relates to a method for modulating cell death or reducing CC DNA damage in an eukaryotic cell by contacting the cell with an agent CC that modulates the biological activity of DNA-dependent protein kinase CC (DNA-PK). The invention also relates nucleic acids which modulate the CC immune response binding to Ku antigen, resulting in activation of DNA-PK. The method is useful for modulating cell death or reducing DNA damage in CC an eukaryotic cell, for treating any disorder resulting from a genotoxic CC for treating cell death related indications such as Alzheimer's disease, CP arkinson's disease, rheumatoid arthritis, septic shock, sepsis, stroke, CC Parkinson's disease, rheumatoid arthritis, septic shock, sepsis, stroke, CC disease, cerebellar degeneration, osteoporosis, degenerative liver CC disease, cerebellar degeneration, reperfusion injury, multiple sclerosis, amyotrophic lateral sclerosis, myocardial infarction, head injury damage, carquired immunodeficiency syndrome (AIDS), aplastic anaemia, cerebral CC infarction, bypass heart surgery, organ transplantation. The method is also useful for treating follicular lymphomas, carcinomas, autoimmune CC also useful for treating follicular lymphomas, carcinomas, autoimmune CC immune mediated glomerulonephritis, apoptosis and viral infections. The present sequence is immunostimulatory oligodoxymucleotide (ISS-ODN) cused for identifying ISS-binding protein, which is used in the
                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cell death; DNA damage; DNA-dependent protein kinase; DNA-PK; necrosis; immune response; apoptosis; Alzheimer's diaease; Parkinson's diaease; reperfusion; osteoporosis; myocardial infarction; liver disease; reperfusion injury; carcinoma; multiple sclerosis; stroke; amyotrophic lateral sclerosis; Acquired Immune Deficiency Syndrome; AIDS; head injury damage; aplastic anaemia; tumour; organ transplantation; cerebral infarction; follicular lymphomas; systemic lupus erythematosus; viral infeccion; glomerulonephritis; apoptosis; autoimmune disorder; sepsis; immunostimulatory oligodeoxynucleotide; ISS-ODN; ss.
                                       AAS16337 standard;
                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page 29; 57pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA-dependent protein kinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Modulating cell death or reducing DNA damage in eukaryotic cells, useful for reducing cell death in individual or organ, comprises contacting cell with agent modulating biological activity of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-062244/08.
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17-JAN-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (REGC ) UNIV CALIFORNIA.
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                                                                                                                                                                                                                  Similarity
15; Conserv
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                                                                                                                                       GAACGTTCGAGATGA 22
                                                                                                                                                                          GAACGTTCGAGATGA 20
                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                  BP; 6 A; 3 C; 7 G; 6 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-202274P.
2001US-262321P.
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                                         DNA;
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100.0%;
                                         22
                                         BP.
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19;
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AAS16338;

AAS16338 standard; DNA; 22

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RESULT 50
AAS16338
ID AAS16
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AC AAS16
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                                                                                                                                                                                                                         Matches
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                                                                                                                                                                                                                                                              The present invention relates to novel methods of treating, preventing, or reducing the severity or recurrence of a symptom of herpes simplex virus (HSV) infection in an individual who has been exposed to or who is infected with HSV. The method comprises administering a polynucleotide having an immunostimulatory sequence (ISS; AAS16337-AAS16345) which induces an immune response. A composition containing ISS is administered without a HSV (alphaherpesvirinae) antigen. The composition can be included in a kit for ameliorating or preventing a symptom of HSV infection caused by herpes virus zoster virus (VZV), HSV-1 and particularly HSV-2. Such HSV infections include chicken pox, herpes ababialis (cold sores) and genital herpes. The present sequence represents one of the ISS polynucleotides of the invention.

Note: The present sequence is shown as single stranded in the specification, but the patentees state on page 20 that this sequence may
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              immune response; alphaherpesvirinae; herpes virus zoster virus; VZV; HSV-1; HSV-2; chicken pox; herpes labialis; cold sore; genital herpes; virucide; phosphorothicate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Preventing, reducing the severity or reducing the recurrence of an infection or symptom of herpes simplex virus (HSV), e.g. HSV-2, comprises administering an immunostimulatory sequence to an individual
                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 5; Page 41; 49pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-MAR-2000;
09-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-041171/05
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                                                                                                                                                                              Local
                                                                                                                                                                                                                                                     double stranded.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polynucleotide #1 useful for treating herpes virus infections.
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                                                                                                                                                              15;
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                                                                                                                                                                             Similarity
                                                                                                                         GAACGTTCGAGATGA 20
                                                                                                                                                                                                                        22
                                                                                                     GAACGTTCGAGATGA 22
                                                                                                                                                               Conservative
                                                                                                                                                                                                                        BP; 6 A; 3 C; 7 G; 6 T; 0 other;
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2001US-0802518.
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                                                                                                                                                                             100.0%;
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                                                                                                                                                                                              71.48;
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                                                                                                                                                                             Score 15;
Pred. No.
                                                                                                                                                               Mismatches
                                                                                                                                                                              19;
                                                                                                                                                                                           DB 24;
                                                                                                                                                               <u>,,</u>
                                                                                                                                                                                           Length 22;
                                                                                                                                                                 Indels
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RESULT 51
AAS16348
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Best Local S
Matches 15
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Animal papillomavirus infection; human sexually transmitted disease; cervical
                                       ISS polynucleotide #1 useful for treating papillomavirus infections.
                                                                    14-FEB-2002
                                                                                                AAS16348
                                                                                                                           AAS16348 standard; DNA; 22 BP
                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                   Note: The present sequence is shown as single stranded in the specification, but the patentees state on page 20 that this s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Preventing, reducing the severity or reducing the recurrence of an infection or symptom of herpes simplex virus (HSV), e.g. HSV-2, comprises administering an immunostimulatory sequence to an indivi-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI;
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09-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12-MAR-2001; 2001WO-US07841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-SEP-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           virucide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HSV-1; HSV-2; chicken
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Herpes simplex virus; HSV infection; immunostimulatory sequence; immune response; alphaherpesvirinae; herpes virus zoster virus; V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SSI
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15; Conserv
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                                                                                                                                                                                                                         GAACGTTCGAGATGA 20
                                                                                                                                                                                                GAACGTTCGAGATGA
                                                                                                                                                                                                                                                                                                                                        stranded
                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                            BP; 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Page 19; 49pp;
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2001US-0802518.
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                                                                   (first entry)
                                                                                                                                                                                                                                                                                                            A; 4
                                                                                                                                                                                                                                               71.4%; 5-
100.0%; Pr/
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               useful
                                                                                                                                                                                                                                                                                                            C; 7
                                                                                                                                                                                                22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                English
                                                                                                                                                                                                                                                                  Score 15; pred. No.
                                                                                                                                                                                                                                                                                                            G; 5 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for treating herpes virus
                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                  DB 24;
. 19;
papillomavirus; HPV; STD; wart;
cancer; immune response;
                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sore; genital herpes;
                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               infections
                                                                                                                                                                                                                                                                                                                                                     sequence may
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           individual
                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                              represents
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RESULT 52
AAS16349
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to novel methods of treating, preventing, or reducing the severity or recurrence of a symptom of papillomavirus infection in an individual that has been exposed to or who is infected with papillomavirus. The method comprises administering a polynucleotide having an immunostimulatory sequence (ISS, AAS16348-AAS16355) which induces an immune response. A composition containing ISS is administered without a papillomavirus antigen. The composition can be included in a kit for ameliorating or preventing a symptom of human or animal kit for ameliorating or preventing a symptom of human or animal papillomavirus infection. Infections with human papillomavirus (HPV) which can be prevented or treated using the method of the invention include sexually transmitted diseases (STDs), warts, papillomas and cervical cancer. The present sequence represents one of the ISS polynucleotides of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Treating, preventing or ameliorating papillomavirus infections, comprises administering a composition comprising a polynucleotide having an immunostimulatory sequence to the individual
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-MAR-2000;
09-MAR-2001;
                        Animal papillomavirus infection; human papillomavirus; HPV; STD; wart; sexually transmitted disease; cervical cancer; immune response;
                                                                      SSI
                                                                                                   14-FEB-2002
                                                                                                                               AAS16349;
                                                                                                                                                          AAS16349
                                                                                                                                                                                                                                                                                                                                                     Sequence
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                                                                                                                                                                                                                                                                                                                                                                                  be double stranded
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             immunostimulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (DYNA-) DYNAVAX TECHNOLOGIES CORP
                                                                   polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4; Page 39; 44pp; English
                                                                                                                                                                                                                                                                                             15;
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                                                                                                                                                                                                                                                              σ
                                                                                                                                                                                                                                                            GAACGTTCGAGATGA 20
                                                                                                                                                          standard; DNA;
                                                                                                                                                                                                                                    GAACGTTCGAGATGA 22
                                                                                                                                                                                                                                                                                                                                                     22 BP; 6
                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-188265P.
2001US-0802445.
                                                                                                (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
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            sequence;
                                                                                                                                                                                                                                                                                                                                                     A; 3 C; 7 G; 6 T; 0 other;
                                                                    #2 useful
                                                                                                  entry)
                                                                                                                                                                                                                                                                                                          71.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Optionally phosphorothicate linkages"
                                                                                                                                                            22
                                                                                                                                                            ВP
                                                                                                                                                                                                                                                                                             0,
             iss;
                                                                                                                                                                                                                                                                                                          Score 15;
Pred. No.
                                                                   for treating papillomavirus infections.
                                                                                                                                                                                                                                                                                             Mismatches
             virucide;
                                                                                                                                                                                                                                                                                                          DB 24;
. 19;
                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                             Indels
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                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                  sequence
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RESULT 53
AAD21877
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Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           or reducing the severity or recurrence of a symptom of papillomavirus infection in an individual that has been exposed to or who is infected with papillomavirus. The method comprises administering a polynucleotide having an immune response. A composition containing ISS is administered without a papillomavirus antigen. The composition can be included in a kit for ameliorating or preventing a symptom of human or animal papillomavirus infection. Infections with human papillomavirus (HPV) which can be prevented or treated using the method of the invention include sexually transmitted diseases (STDs), warts, papillomas and cervical cancer. The present sequence represents one of the ISS polynucleotides of the invention
modified_base
                                            Unidentified
                                                                    phosphorothioate
                                                                                     cytomegalovirus;
varicella zoster
                                                                                                                         Cytotoxic T lymphocyte; CTL; T cell; tumour load; cancer radiotherapy; immunostimulatory sequence oligonucleotide; ISS-ODN; chemotherapy; immunosuppression; transplantation; autoimmune disease; infection;
                                                                                                                                                                                   Immunostimulatory sequence oligonucleotide (ISS-ODN) #1.
                                                                                                                                                                                                                12-FEB-2002
                                                                                                                                                                                                                                                                      AAD21877 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
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09-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                    'immune déficiency syndrome; AIDS;
lovirus; mycobacterial infection; E
a zoster virus; human immunodeficie
othioate backbone; ss.
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                                                                                                                                                                                                                                                                                                                                           GAACGTTCGAGATGA 22
                                                                                                                                                                                                                                                                                                                                                                    GAACGTTCGAGATGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   preventing or ameliorating papillomavirus infections, administering a composition comprising a polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      immunostimulatory sequence to
                                                                                                                                                                                                                                                                                                                                                                                               71.4%; Score 15; DB 24; ilarity 100.0%; Pred. No. 19; Conservative 0; Mismatches 0
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2001US-0802445.
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                                                                                     immunodeficiency virus; HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                        5 T; 0 other;
                                                                                                infection; Epstein-Barr virus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               single stranded on page 20 that
                                                                                                              intracellular pathogen;
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                                                                                                                                                                                                                                                                                                                                                             The present invention relates to a method for increasing antigen-specific CC cytotoxic T lymphocyte (CTL) activity in a CD4+ T cell-deficient CC individual, comprising administering an immunostimulatory sequence CC oligonucleotide (ISS-ODN). The immunostimulatory nucleic acids of the CD4+ T cell-deficient individuals to decrease CC invention are used in CD4+ T cell-deficient individuals to decrease CC tumour load, to treat a primary or acquired immunodeficiency; or temporary and due to cancer radiotherapy or chemotherapy or immunosuppression following CC bone marrow or organ transplantation, or autoimmune disease treatment, CC or is acquired immunodeficiency syndrome (AIDS). The nucleic acids may be used to treat a person at risk of becoming CD4+ T cell-deficient, CC used to treat infection, particularly by an intracellular pathogen, CC used to treat infection, particularly by an intracellular pathogen, CC used to treat infection, particularly by an intracellular pathogen, CC used to treat infection, particularly by an intracellular pathogen, CC used to treat infection, particularly by an intracellular pathogen, CC used to treat infection, particularly by an intracellular pathogen, CC used to treat infection, particularly by an intracellular pathogen, CC used to treat infection, particularly by an intracellular pathogen, CC disulfide-linked phosphorothioate immunostimulatory sequence is a 5' cc oligonucleotide (ISS-ODN), used in the exemplification of the invention.
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Matches 15
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11-MAY-2000;
05-JUL-2000;
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(VETE-)
                                                                                                                                                                                                                                                                                                                                                             Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Increasing antigen-specific cytotoxic T lymphocyte activity in a CD4+cell deficient individual, useful to treat immunodeficiency and block
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Immunomodulatory polynucleotide/microcarrier complex; IMP/MC; IgE;
                               Immunostimulatory sequence (ISS)
                                                                                                      ABA03833;
                                                                                                                                    ABA03833 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HIV infection, comprises administering immunostimulatory nucleic acid
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; 2000US-203567P.
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                                                                                                                                                                                                                                                                                            Conservative
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VETERANS AFFAIRS
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Pred. No.
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CC microcarrier (IMP/MC) complex (I) which comprises a polynucleotide CC microcarrier (MC). The ISS comprises the sequence: 5'-CG-3', where the CC microcarrier (MC). The ISS comprises the sequence: 5'-CG-3', where the CC MC is less than 10 micro m in size. (I) has immunomodulator, is antibacterial, antiprotozoal, antiparasitic, hepatotropic CC antiallergic, antibacterial, antiprotozoal, antiparasitic, hepatotropic CC antiallergic, antibacterial, antiprotozoal, antiparasitic, hepatotropic CC and nephrotropic activities. It can be used as an interferon (IFN)-alpha CC (I) can be used for modulating the immune response of individuals, comparaticularly humans. The IMP/MC complex is particularly useful for CC (I) can be used for modulating the immune response of individuals, corrections (IFN)-alpha CC (I) can be used for modulating the immune response of individuals, corrections (IFN)-alpha CC (I) can be used by cellular pathogen (e.g. anycobacterial disease, CC diseases caused by cellular pathogen (e.g. anycobacterial disease, CC diseases caused by cellular pathogen (e.g. anycobacterial disease, CC chlomorchiasis, or disorders associated with a Thirtype immune CC response (e.g. allergies or allergy-induced asthma). The IMP/MC may CC also be used in individuals receiving therapeutic or prophylactic crisk of exposure to an infectious agent. The present sequence represents CC assepti invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 14; Page 49; 63pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  modulating the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI;
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09-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              present invention describes an immunomodulatory polynucleotide,
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                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                          invention.
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GAACGTTCGAGATGA 22
                                                            GAACGTTCGAGATGA 20
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                                                                                                                  CC microcarrier (IMP/MC) complex (1), which comprises a polynucleotide (1) chaving an immunostimulatory sequence (ISS) linked to a biodegradable microcarrier (MC). The ISS comprises the sequence: 5'-CG-3', where the CC microcarrier (MC). The ISS comprises the sequence: 5'-CG-3', where the CC microcarrier (MC). The ISS comprises the sequence: 5'-CG-3', where the CC microcarrier (MC). The ISS comprises the sequence: 5'-CG-3', where the CC microcarrier (I) has immunomodulator. CC cantiallergic, antibacterial, antiprotozoal, antiparasitic, hepatotropic complex is microcarrier (ITN)-alpha to the standator, IFN-gamma stimulator or an immunoglobulin E (IgE) stimulator. CC (I) can be used for modulating the immune response of individuals, particularly useful for treating idiopathic pulmonary fibrosis (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cutaneous compression (IPP), scleroderma, cuta
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        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New immunomodulatory polynucleotide/microcarrier complex, useful for modulating the immune response of individuals, particularly humans, of treating idiopathic pulmonary fibrosis, scleroderma, malaria or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-MAR-2000;
09-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                idiopathic pulmonary fibrosis; cutaneous radiation-induced fibrosis; hepatic fibrosis; renal fibrosis; infectious disease; leishmaniasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 18; 63pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-049002/06
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (DYNA-) DYNAVAX TECHNOLOGIES CORP
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                                                                                        given in
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        22 BP; 6
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2001US-0802359.
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                                                                                        the exemplification of the present
        A; 4 C; 7 G; 5 T; 0 other;
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RESULT 56
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                                                                                                                     method comprises administering a composition consisting of a polynucleotide having an immunostimulatory sequence (ISS). The ISS comprises the sequence 5'-C,G,pyrimidine,pyrimidine,C,G-3'. An antigen is administered in conjunction with the composition. ISS has virucide activity and can be used in gene therapy. The method using the ISS can be used for suppressing, ameliorating and/or preventing viral infections to an individual who may be at risk of being exposed to, exposed to or infected by a virus. It may also be used in reducing the recurrence or duration of a symptom of viral infection, delaying the development of a virus infection, and reducing viraemia or blood levels of virus antigens. The present sequence represents a specifically claimed ISS for use in the method of the invention.
                                                                                               Sequence
                                                                                                                                                                                                                                                                        The present invention describes a method for reducing severity of a symptom of virus infection in an individual infected with a virus. The
                                                                                                                                                                                                                                                                                                              Claim 4;
                                                                                                                                                                                                                                                                                                                                      sequence
                                                                                                                                                                                                                                                                                                                                                Reducing severity, recurrence or duration of symptom of virus infection, or reducing viremia or blood levels of virus antigen, comprises administering a polynucleotide having an immunostimulatory
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09-MAR-2001;
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                       GAACGTTCGAGATGA 20
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2001US-0802685.
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                                               score 15; DB
f; Pred. No. 19;
0; Mismatches
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                                                                                                G; 6 T; 0 other;
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therapy; viraemia; phosphorothioate;
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                                                           DB 24;
19;
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RESULT 58
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09-MAR-2001;
                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                exemplification of the present invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 20; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  comprises administering a polynucleotide having an immunostimulatory
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         Immunostimulatory sequence (ISS) SEQ ID NO:1
                                    12-FEB-2002
                                                             ABA03856;
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                                                                                                                                                                                                                                                                                             antigens. The present sequence represents an ISS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence
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immunomodulation; virucide;
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2001US-0802685.
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100.0%; Pr
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therapy; viraemia;
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19;
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RESULT 59
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                                                                                                                                                                                                                                                                                  the composition, and where the composition is administered in an amount sufficient to reduce HBV viraemia or blood levels of a hepatitis virus antigen. ISS has virucide, anti-inflammatory and hepatotropic activities, and can be used in gene therapy. The method can be used for suppressing and/or ameliorating hepatitis infection in an individual, especially for preventing, palliating, ameliorating, reducing and/or eliminating one or more symptoms of HBV or HCV (hepatitis C virus) infection without administering HBV or HCV antigens. The method is specifically useful for reducing viraemia and hepatitis viral antigen in blood. ISS-containing polymucleotides may also be used to improve physical symptoms such as jaundice, fatigue, abdominal pain, and other clinical/ laboratory portal hypertension, or cirrhosis. The present sequence represents a specifically claimed ISS oligonucleotide for use in the method of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         levels of a hepatitis virus antigen in an individual infected with hepatitis B virus (HBV). The method comprises administering a composition comprising a polynucleotide having an immunostimulatory sequence (ISS) to the individual, where the ISS comprises the sequence 5°-C, G-3°, an HBV antigen is not administered in conjunction with administration of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Reducing viremia and blood levels of hepatitis virus antigen in an individual infected with hepatitis B virus, comprises administering composition comprising a polynucleotide having an immunostimulatory
                                                                                                                                                                                                                                     Sequence 22
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09-MAR-2001;
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2001US-0802370.
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AAS15592 standard; DNA; 22

AAS15592;

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                                                                                                                                                                                                                                                                                                                  the composition, and where the composition is administered in an amount sufficient to reduce HBV viraemia or blood levels of a hepatitis virus antigen. ISS has virucide, anti-inflammatory and hepatotropic activities, and can be used in gene therapy. The method can be used for suppressing and/or ameliorating hepatitis infection in an individual, especially for preventing, palliating, ameliorating, reducing and/or eliminating one or more symptoms of HBV or HCV (hepatitis C virus) infection without administering HBV or HCV antigens. The method is specifically useful for reducing viraemia and hepatitis viral antigen in blood. ISS-containing polymucleotides may also be used to improve physical symptoms such as jaundice, fatigue, abdominal pain, and other clinical/ laboratory findings associated with hepatitis such as blood levels of liver enzymes, portal hypertension, or cirrhosis. The present sequence represents an invertion.
                                                                                                                                                                                                                                   Sequence 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes a method for reducing viraemia or blood levels of a hepatitis virus antigen in an individual infected with hepatitis (HBV). The method comprises administering a composition comprising a polynucleotide having an immunostimulatory sequence (ISS) to the individual, where the ISS comprises the sequence 5'-C, G-3', an HBV antigen is not administered in conjunction with administration of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 20; 43pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Reducing viremia and blood levels of hepatitis virus antigen in an individual infected with hepatitis B virus, comprises administering composition comprising a polynucleotide having an immunostimulatory
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09-MAR-2001;
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GAACGITCGAGATGA 22
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2001US-0802370.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a polynucleotide vaccine (I) comprising a uncleic acid sequence encoding an antigen derived from a non-host species of a first phylum or first kingdom, where the nucleic acid sequence encoding the antigen is modified by deletion of a native signal sequence, and/or an immune response to an antigen, especially a plant (ragweed or grass pollen), food, latex, cat dander, cockroach or house dust mite allegen. (I) is also useful for eliciting an immune response to an antigen especially a plant (ragweed or grass pollen), food, latex, cat dander, cockroach or house dust mite allegen. (I) is also useful for eliciting an immune response to an antigen derived from a pathogen, such as bacterium, virus or a parasite. The vaccine is co-administered with an immunostimulatory nucleotide sequence which comprises an unmethylated 5'-CG-3' nucleotide sequence. Antigens of pathogens can be present sequence represents fungal, yeast or other pathogens. The present sequence represents with (I) to amplify the immune response to the co-administered allergen.
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IFN-gamma;
      Immunomodulatory composition; immune response; Th2-type immune response; allergy; asthma; infectious disease; vaccine; cancer; IFN-alpha; IFN-gamma; idiopathic pulmonary fibrosis; scleroderma;
                                                                                                                                  Nucleotide sequence of a control immunostimulatory oligonucleotide
                                                                                                                                                                                                       03-JUN-2003
                                                                                                                                                                                                                                                                                                                                ABZ77582 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New polynucleotide vaccine for eliciting immune response to an antigen derived from a pathogen, plant or food, comprises antigen-encoding nucleic acid sequence derived from non-host species of first phylum or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Immunomodulatory composition for modulating immune response and reducing levels of immunoglobulin E in an individual having the disorder, has a complex of microcarrier and an immunomodulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-AUG-2001; 2001US-310743P.
25-OCT-2001; 2001US-335263P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cutaneous radiation-induced fibrosis; hepatic fibrosis; renal fibrosis;
viral infection; mycobacterial disease; malaria; leishmaniasis;
 CTL recognition antigen-related oligonucleotide,
                                                                                                                                                                                                                                                                                                                         Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           toxoplasmosis; schistosomiasis; clonorchiasis; ss.
                                   10-APR-2003
                                                                                                   AAL51531 standard; DNA; 22 BP
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                                                                                                                                                                                                                                                                                                                                                          of the invention.
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                                   (first entry)
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%; Pred. No. 19;
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                                                                                                             modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Screening of cytotoxic T-lymphocyte-recognition antigen with a human T-lymphotrophic leukemia virus-1 (HTLV-1) antitumor effect, for use a vaccine, comprises administering a test substance to a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cytotoxic T-lymphocyte recognition antigen; CTL recognition antigen; human T-lymphotrophic leukaemia virus-1; HTLV-1; tumour; health food immune response-inducible vaccine; ds; primer; probe.
25-JUN-2002; 2002WO-IL00507
                          03-JAN-2003
                                                 WO2003000232-A2
                                                                                                                                                                                                               Immunostimulatory oligodeoxynucleotide ISS-ODN 1018.
                                                                                                                                                                                                                                           14-APR-2003
                                                                                                                                                                                                                                                                    ABZ57964;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 22 BP; 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   oligonucleotide that was used in an example of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 10; Page 29; 53pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HTLV-1-associated disease animal model
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                                                                                                                                                                                         ISS-ODN 1018;
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                                                                                                              Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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                                                                                                                                                                ISS: cancer; allergy; asthma; hepatitis B infection; papillomavirus; human immunodeficiency virus; influenza; herpes; M. tuberculosis; ss; B. pertussis; malaria; plasmodia; Leishmania; Trypanosoma; Schistosom
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17-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                            Immunomodulatory oligo comprising an ISS sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAV80098;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAV80098 standard; DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example; Page 19; 68pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Barenholz Y,
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                                                                                                                                                                                                                                                                                                  mmunomodulatory;
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2001US-339785P
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                                                                                                                                                                                                                                                                                                  immunostimulatory;
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Pred. No.
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                                                                                                                                                                                                                                                                                              octanucleotide; immune regulation;
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19;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 22;
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Tighe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 immunostimulatory activity by incubating macrophage cells and the oligonucleotide; and determining the relative amount of Thi-biased cytokines in the supernatant. Sequences AAV80096 to AAV80103 represent specific claimed examples of such immunomodulatory oligonucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Immunostimulatory oligonucleotides regulate the immune contain an immune-stimulating octanucleotide sequence; cancer, allergic and infectious diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-JUN-1998;
                                                        09-OCT-1998;
07-OCT-1999;
                                                                                                 08-OCT-1999;
                                                                                                                             20-APR-2000
                                                                                                                                                         WO200021556-A1
                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                             gp120; human
development;
                                                                                                                                                                                                                          Immunostimulatory sequence; ISS; immunomodulator; glycoprotein 120;
gp120; human immunodeficiency virus; HIV; immune response; infection;
                                                                                                                                                                                                                                                                                                24-AUG-2000
                                                                                                                                                                                                                                                                                                                                                      AAA38067 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
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                             (DYNA-) DYNAVAX TECHNOLOGIES CORP.
                                                                                                                                                                                                                                                                   Immunostimulatory
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        conjugated to an immunomodulatory polynucleotide, or is proximately associated to it and not conjugated, is used for modulating or stimulating a specific immune response against gpl20 in an individual by producing anti-gpl20 antibodies or gpl20 specific cytotoxic T cells. It is also used for suppressing or delaying development of HIV infection in an individual infected with HIV or an individual at risk of infection with HIV, respectively. It is also used for treating an individual infected with HIV also used for treating an individual infected with HIV in need of immune modulation.
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                                                                                     Suppressing a respiratory syncytial virus infection by administering immunostimulatory sequence at the site of infection is useful to prevent and treat lower respiratory tract viral infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Respiratory syncytial virus. Synthetic.
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09-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAS14666;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 23 BP; 6 A; 8 C; 3 G; 6 T; 0 other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       comprising a human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Immunostimulatory sequence; ISS; ds; antiviral; immunogen;
respiratory syncytial virus; RSV; influenza virus; rhinovirus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Immunostimulatory sequence, ISS #3.
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                                                                                                                                                                                                                                                                                                                                        (DYNA-) DYNAVAX TECHNOLOGIES CORP
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2001US-0802686.
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Disclosure; Page 15; 40pp; English

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RESULT 67
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microcarrier complexes. The complexes comprise an immunostimulatory sequence (ISS), e.g. the present sequence, linked to a nonbiodegradable microcarrier provided that if the microcarrier is gold, latex or magnetic then the linkage is not biotin/avidin. The complex is useful for modulating an immune response (especially stimulating a Thi-type response or suppressing a Th2-type response), increasing interferon-gamma (especially in a patient suffering from idiopathic pulmonary fibrosis), increasing interferon-alpha (especially in patients suffering from viral increasing interferon-alpha (especially in patients suffering from viral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           including influenza virus, rhinovirus, adenovirus, measles virus, mumps virus, parainfluenza virus, rubella virus, poxvirus, parvovirus, hantavirus and varicella virus. A kit for carrying out the administration is also included. Unlike the prior art antiviral agent ribavirin, which is a potential teratogen, the invention provides a treatment which does not carry unacceptable side effects. Other prior art medicaments treat the symptoms only, whilst the invention treats the
                                                                                                                                                                                                                        The present invention relates to immunomodulatory polynucleotide/
                                                                                                                                                                                                                                                                                                                                                                                      Immunomodulatory polynucleotide/microcarrier complexes comprise an immunostimulatory sequence containing polynucleotide linked to a nonbiodegradable microcarrier -
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09-MAR-2001; 2001US-0802376.
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the sequence 5'-C, G-3', where an RSV antigen is not administered.
The invention is used to prevent and treat respiratory syncytial
virus infection of the lower respiratory tract and other viruses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (DYNA-) DYNAVAX TECHNOLOGIES CORP
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Th2-type immune response; interferon; idiopathic pulmonary fibrosis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             infection. The present sequence is an ISS of the invention.
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llarity 100.0%;
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Pred. No.
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                                                                                                  (IIS) of conjugate molecules (CMS) comprising immunostimulatory sequences (ISS) of polynucleotides and antigens. The extent of conjugation affects the immunological properties (e.g. the extent of antigen-specific antibody formation, including Th1-associated antibody formation) so the conjugates are used for altering the type and extent of immune response. (I) and (II) have immunomodulatory, immunosuppressive and antiallergic activities, and can be used in the modulation of immune responses via the stimulation of Th1 lymphocytes and Th1-associated cytokines, and suppression of Th2 lymphocytes and Th1-associated cytokines, and (II) of conjugate molecules may be used for modulating immune responses in individuals e.g. for the treatment of an allergic condition. (I) and (II) may be used to modulate immune responses and therefore prevent potentially harmful reactions to antigens. The present sequence represents an ISS polymucleotide which is used in the exemplification
                                                                                                                                                                                                                                                                                                                                                                             Populations of conjugate molecules comprising polynucleotide immunostimulatory sequences polynucleotides and antigens, useful for controlling immune responses -
                                                          Sequence 23 BP; 6 A; 8 C; 3 G; 6 T; 0 other;
                                                                                                                                                                                                                                                                                                         The present invention describes immunomodulatory populations ((I) and (II)) of conjugate molecules (CMs) comprising immunocations.
                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-NOV-1999; 99US-0165467.
14-NOV-2000; 2000US-0713136.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antigen; antiallergic; modulation; Th1 lymphocyte stimulation; all Th1-associated cytokine; Th2 lymphocyte suppression; cytokine; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Immunostimulatory sequence; ISS; immunomodulatory; immune response;
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les 15; Conserv
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100.0%; Pr/
              71.4%;
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              Score 15; pred. No.
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T14-FEB-2002 (first entry)

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DT 14-FEB-2002 (first entry)

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DE ISS polynucleotide #3 usef

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Herpes simplex virus; HSV

XW

immune response; alphaher;

XW

HSV-1; HSV-2; chicken pox

XW

Virucide; ss.

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Synthetic.

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W0200168103-A2.
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AAF77042/c
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                                                                                                                                                Herpes simplex virus; HSV infection; immunostimulatory sequence; ISS; immune response; alphaherpesvirinae; herpes virus zoster virus; VZV; HSV-1; HSV-2; chicken pox; herpes labialis; cold sore; genital herpes; virucide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to modulating an immune response to a second antigen in an individual, involving an administering to the individual an immunomodulatory polynucleotide comprising an immunostimulatory sequence (ISS) and a first antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Modulating immune response to a second antigen in humans involves administering an immunostimulatory polynucleotide comprising an immunostimulatory sequence and a first antigen -
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AAF77042 standard; DNA;
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                                                                                                                                                                                                                                                                                                    ISS polynucleotide #3 useful for treating herpes virus infections
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19;
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AAS16350/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to novel methods of treating, preventing, or reducing the severity or recurrence of a symptom of herpes simplex virus (HSV) infection in an individual who has been exposed to or who is infected with HSV. The method comprises administering a polynucleotide having an immune response. A composition containing ISS is administered induces an immune response. A composition containing ISS is administered without a HSV (alphaherpesvirinae) antigen. The composition can be included in a kit for ameliorating or preventing a symptom of HSV infection caused by herpes virus zoster virus (VZV), HSV-1 and particularly HSV-2. Such HSV infections include chicken pox, herpes can be cone of the ISS polynucleotides of the invention.

Note: The present sequence is shown as single stranded in the specification, but the patentees state on page 20 that this sequence may be desired as the patentees state on page 20 that this sequence may
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
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Matches 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-MAR-2000;
09-MAR-2001;
                             10-MAR-2000;
09-MAR-2001;
                                                                                                                                                                                                        Animal papillomavirus infection; human papillomavirus; HPV; STD; wart; sexually transmitted disease; cervical cancer; immune response;
                                                                                                                                                                                                                                                                                                                                               AAS16350 standard; DNA; 23 BP
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                                                                                                     20-SEP-2001.
                                                                                                                                   WO200168117-A2
                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                     ISS polynucleotide #3 useful for treating papillomavirus infections.
                                                                                                                                                                                                                                                                                    14-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (DYNA-) DYNAVAX TECHNOLOGIES
                                                                        12-MAR-2001; 2001WO-US07842
                                                                                                                                                                                            immunostimulatory sequence; ISS; virucide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       double stranded.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               l Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ilarity 100.0%;
Conservative
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2001US-0802518.
                             2000US-188265P.
2001US-0802445.
                                                                                                                                                                                                                                                                                    (first entry)
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(DYNA-) DYNAVAX TECHNOLOGIES

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Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             with papillomavirus. The method comprises administering a polynucleotide having an immunostimulatory sequence (185; AAS16348-AAS16355) which induces an immune response. A composition containing ISS is administered without a papillomavirus antigen. The composition can be included in a kit for ameliorating or preventing a symptom of human or animal papillomavirus infection. Infections with human papillomavirus (HPV) which can be prevented or treated using the method of the invention include sexually transmitted diseases (STDs), warts, papillomas and cervical cancer. The present sequence represents one of the ISS polynucleotides of the invention.
                                                                                                                                                                                                                                                                                                  Optotoxic T lymphocyte; CTL; T cell; tumour load; cancer radiotherapy; immunostimulatory sequence oligonucleotide; ISS-ODN; chemotherapy; immunosuppression; transplantation; autoimmune disease; infection; acquired immune deficiency syndrome; AIDS; intracellular pathogen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     specification, but the patentees state be double stranded.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Note: The present sequence is shown as single stranded in the specification, but the patentees state on page 20 that this sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The
              04-OCT-2001
                                          WO200172123-A1
                                                                                                                    misc_feature
                                                                                                                                                                             modified_base
                                                                                                                                                                                                                             Unidentified
                                                                                                                                                                                                                                                         phosphorothioate backbone;
                                                                                                                                                                                                                                                                       cytomegalovirus; mycobactérial infection; Epstein-Barr virus; varicella zoster virus; human immunodeficiency virus; HIV;
                                                                                                                                                                                                                                                                                                                                                                               Immunostimulatory
                                                                                                                                                                                                                                                                                                                                                                                                             12-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                           AAD21879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAD21879 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 20; 44pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              having an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Treating, preventing or ameliorating papillomavirus infections, comprises administering a composition comprising a polynucleoti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Van Nest
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  reducing the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ng the severity or recurrence of a symptom of papillomavirus in an individual that has been exposed to or who is infected
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    invention relates to novel methods of treating,
                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                              /*tag= a
/mod_base= OTHER
                                                                                        note= "This residue
                                                                                                      *tag=
                                                                                                                                 note= "Phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                            sequence oligonucleotide (ISS-ODN)
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                                                                   = "This residue is in page 44 of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C; 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 24;
                                                                       not found in the sequence specification"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19;
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RESULT 73
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          individual, comprising administering an immunostimulatory sequence oligonuclectide (ISS-ODN). The immunostimulatory nucleic acids of the invention are used in CD4+ T cell-deficient individuals to decrease tumour load, to treat a primary or acquired immunodeficiency, of the cancer radiotherapy or chemotherapy or immunosuppression following to cancer radiotherapy or chemotherapy or immunosuppression following to marrow or organ transplantation, or autoimmune disease treatment, or is acquired immunodeficiency syndrome (AIDS). The nucleic acids may be used to treat a person at risk of becoming CD4+ T cell-deficient, particularly where someone at risk of cancer recurrence. They are also used to treat infection, particularly by an intracellular pathogen, especially one caused by cytomegalovirus, Mycobacterium tuberculosis, M. avium, Bpstein-Barr virus, a fungus yeast, varicella zoster virus or human immunodeficiency virus (HIV). The present sequence is a phosphorothioate immunostimulatory sequence oligonucleotide (ISS-ODN), used in the exemplification of the invention.
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11-MAY-2000;
05-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (REGC )
                                                                                             immunoglobulin E stimulator; immune response; IPF; scleroderma; malaria; idiopathic pulmonary fibrosis; cutaneous radiation-induced fibrosis; hepatic fibrosis; renal fibrosis; infectious disease; leishmaniasis;
                                                                                                                                                immunomodulation; immunostimulation; phosphorothioate; immunomodulator; antiallergic; antibacterial; antiprotozoal; antiparasitic; hepatotropic; nephrotropic; interferon-alpha stimulator; interferon-gamma stimulator;
                                                               allergy; allergy-induced
                                                                                                                                                                                                                                                                                                                                                ABA03835 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a method for increasing antigen-specific cytotoxic T lymphocyte (CTL) activity in a CD4+ T cell-deficient
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Increasing antigen-specific cytotoxic T lymphocyte activity in a CD4+cell deficient individual, useful to treat immunodeficiency and block HIV infection, comprises administering immunostimulatory nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Raz E,
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                                                                                   mycobacterial disease; toxoplasmosis; schistosomiasis; chlonorchiasis;
                                                                                                                                                                                                    Immunomodulatory polynucleotide/microcarrier complex; IMP/MC;
                                                                                                                                                                                                                                         Immunostimulatory sequence (ISS) SEQ ID NO:3.
                                                                                                                                                                                                                                                                               12-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6 GAACGTTCGAGATGA 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; 2000US-192537P.
; 2000US-203567P.
; 2000US-215895P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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                                                                 asthma; prophylactic
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WO200168144-A2

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 microcarrier (IMP/MC) complex (I), which comprises a polynucleotide chaving an immunostimulatory sequence (ISS) linked to a biodegradable microcarrier (MC). The ISS comprises the sequence: 5. CG-3', where the MC is less than 10 micro m in size. (I) has immunomodulator, antipared; antipared; antipared; (IPP) alpha stimulator. IFN-gamma stimulator or an immunoglobulin E (IgE) stimulator. (IP) can be used as an interferon (IPN)-alpha stimulator. (IP) can be used for modulating the immune response of individuals, particularly humans. The IMP/MC complex is particularly useful for treating idiopathic pulmonary fibrosis (IPP), scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis, renal fibrosis, infectious diseases caused by cellular pathogen (e.g. a mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis or chionorchiasis), or disorders associated with a Th2-type immune response (e.g. allergies or allergy-induced asthma). The IMP/MC may also be used in individuals suffering from cancer, or in individuals at the complex or in individuals at the complex or in individuals and complex is companiated.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 15
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09-MAR-2001;
                             20-SEP-2001
                                                                                       WO200168077-A2
                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                 Immunostimulatory sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABA03846 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New immunomodulatory polynucleotide/microcarrier complex, useful for modulating the immune response of individuals, particularly humans, for treating idiopathic pulmonary fibrosis, scleroderma, malaria or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Van Nest G,
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                                                                                                                                                                                                  immunomodulation;
                                                                                                                                                                                                                                                                                                                                           12-FEB-2002
                                                                                                                                                                                                                          Immunostimulatory
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             present invention describes an immunomodulatory polynucleotide,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        in individuals suffering from cancer, or in individuals at xposure to an infectious agent. The present sequence represents ven in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        71.4%; ilarity 100.0%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Page 18; 63pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 6 A; 8 C; 3 G; 6 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tuck S;
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2001US-0802359.
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virucide;
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                                                                                                                                                                                          immunostimulation;
therapy; viraemia;
                                                                                                                                                                                                                                                                                 SEQ
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Best Local S
Matches 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-MAR-2000;
09-MAR-2001;
                                                       10-MAR-2000;
09-MAR-2001;
                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                          Immunostimulatory sequence; ISS; immunomodulation; HBV; HCV; infection; hepatitis B virus; hepatitis C virus; virucide; anti-inflammatory; hepatotropic; gene therapy; hepatitis infection; viraemia; jaundice;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 20; 65pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               comprises administering a polynucleotide having an immunostimulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Reducing severity, recurrence or duration of symptom of virus infection, or reducing viremia or blood levels of virus antigen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-048999/06
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                                                                                                      12-MAR-2001;
                                                                                                                                    20-SEP-2001.
                                                                                                                                                                   WO200168078-A2
                                                                                                                                                                                                                              fatigue;
                                                                                                                                                                                                                                                                                                       Immunostimulatory sequence (ISS) SEQ ID NO:3.
                                                                                                                                                                                                                                                                                                                                                                                                  ABA03858 standard; DNA;
                           (DYNA-) DYNAVAX TECHNOLOGIES CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (DYNA-) DYNAVAX TECHNOLOGIES CORP
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2001US-0802685.
                                                       2000US-188301P.
2001US-0802370.
                                                                                                      2001WO-US07931.
                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; 8 C; 3 G; 6 T; 0 other;
                                                                                                                                                                                                                            pain; portal hypertension; cirrhosis;
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The present invention describes a method for reducing viraemia or blood CC levels of a hepatitis virus antigen in an individual infected with CC hepatitis B virus (HBV). The method comprises administering a composition CC comprising a polynucleotide having an immunostimulatory sequence (ISS) CC to the individual, where the ISS comprises the sequence 5'-C, G-3', and CB WB antigen is not administered in conjunction with administration of the composition, and where the composition is administered in an amount CC sufficient to reduce HBV viraemia or blood levels of a hepatitis virus CC antigen. ISS has virucide, anti-inflammatory and hepatotropic activities, and can be used in gene therapy. The method can be used for suppressing CC and/or ameliorating hepatitis infection in an individual, especially for preventing, palliating, ameliorating, reducing and/or eliminating one or CC more symptoms of HBV or HCV (hepatitis C virus) infection without CC administering HBV or HCV (hepatitis Viral antigen in blood. ISS-containing CC polynucleotides may also be used to improve physical symptoms such as governable associated with hepatitis such as blood levels of liver enzymes, portal hypertension, or cirrhosis. The present sequence represents an CC ISS oligonucleotide given in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Reducing viremia and blood levels of hepatitis virus antigen in an individual infected with hepatitis B virus, comprises administering a composition comprising a polynucleotide having an immunostimulatory sequence
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밁 Ś Search completed: December 17, 2003, 09:18:02 Job time : 150 secs Query Match Best Local & Matches Sequence 23 15 GAACGTTCGAGATGA 1 l Similarity 15; Conserva 6 GAACGTTCGAGATGA 20 71.4%; Score 15; DB 24; llarity 100.0%; Pred. No. 19; Conservative 0; Mismatches 0 BP; 6 A; 8 C; 3 G; 6 T; 0 other; 0 Length 23; Indels <u>,</u> Gaps

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APPLICANT: FEARON, Karen L.

APPLICANT: DINA, Dino

TITLE OF INVENTION: METHODS OF USING THE SAME

TITLE OF INVENTION: METHODS OF USING THE SAME

FILE REFERENCE: 377882001800

CURRENT APPLICATION NUMBER: US/10/033,243

CURRENT FILING DATE: 2002-04-03

PRIOR APPLICATION NUMBER: 60/258,675

PRIOR APPLICATION NUMBER: 60/258,675

PRIOR APPLICATION NUMBER: 30/258,675

PRIOR FILING DATE: 2000-12-27

NUMBER OF SEQ ID NOS: 133

SOFTWARE: FRSTSEQ for Windows Version 4.0

SEQ ID NO 132

LENGTH: 21

TYPE: DNA

ORGANISM: Artificial Sequence
           CURRENT APPLICATION NUMBER: US/09/927,422A
CURRENT FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: U.S. 09/802,359
PRIOR FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: U.S. 60/188,30
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEQ ID NOS: 23
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 16
LENGTH: 19
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US-10-033-243-132
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                                                                                                                                                                                                                                                                                                        Sequence 16, Application US/09927422A
Publication No. US20030022852A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                     APPLICANT: Fearon, Karen L.
APPLICANT: Dina, Dino
TITLE OF INVENTION: BIODEGRADABLE IMMUNOMODULATORY
TITLE OF INVENTION: FORMULATIONS AND METHODS FOR U
FILE REFERENCE: 377882001420
                                                                                                                                                                                                                                                         APPLICANT: Van Nest, Gary APPLICANT: Tuck, Stephen
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OTHER INFORMATION: Polynucleotide containing
TYPE: DNA
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US-10-176-883-98

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US-10-177-826-98

US-10-177-826-104

US-10-033-243-98

US-10-176-883-33

US-10-176-883-33

US-10-176-883-83

US-10-176-883-83

US-10-176-883-83
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Pred. No. 0.0041
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CURRENT APPLICATION NUMBER: US/10/176,883

CURRENT FILING DATE: 2002-06-21

PRIOR APPLICATION NUMBER: 60/299,883

PRIOR FILING DATE: 2001-06-21

PRIOR APPLICATION NUMBER: 60/375,253

PRIOR FILING DATE: 2002-04-23

NUMBER OF SEQ ID NOS: 141

SOFTWARE: FastSEQ for Windows Version 4.0

SECTION 041
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US-10-177-826-41
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                                           SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 41
                                                                                                                                                                                                                                                                                         Sequence 41, Application US/10177826 Publication No. US20030199466A1 GENERAL INFORMATION:
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Best Local :
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Best Local Similarity
                                                                        TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS
TITLE OF INVENTION: METHODS OF USING THE SAME-II
FILE REFERENCE: 377882002001
CURRENT APPLICATION NUMBER: US/10/177,826
CURRENT FILING DATE: 2002-66-21
RRIOR APPLICATION NUMBER: 60/299,883
PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
                                                                                                                                                                                                                                        APPLICANT: Fearon, Karen
APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
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APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
               LENGTH: 19
TYPE: DNA
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TYPE: DNA
ORGANISM: Artificial Sequence
ORGANISM: Artificial Sequence
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0.065;
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TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND TITLE OF INVENTION: METHODS OF USING THE SAME FILE REFERENCE: 377882001800
CURRENT APPLICATION NUMBER: US/10/033,243
CURRENT FILING DATE: 2002-04-03
PRIOR APPLICATION NUMBER: 60/258,675
PRIOR APPLICATION NUMBER: 60/258,675
PRIOR FILING DATE: 2000-12-27
NUMBER OF SEQ ID NOS: 133
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 19
LENGTH: 19
TYPE: DNA
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US-10-033-243-19
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; Sequence 52, App
; Publication No.
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                                                                     NUMBER OF SEQ ID NOS: 141
SOFTWARE: FRETSEQ for Windows Version 4.0
SEQ ID NO 52
LENGTH: 22
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                          TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND TITLE OF INVENTION: METHODS OF USING THE SAME-I FILE REFERENCE: 377882002000 CURRENT APPLICATION NUMBER: US/10/176,883 CURRENT FILING DATE: 2002-06-21 PRIOR APPLICATION NUMBER: 60/299,883 PRIOR APPLICATION NUMBER: 60/299,883 PRIOR PILING DATE: 2001-06-21 PRIOR PILING DATE: 2002-04-23 PRIOR PILING DATE: 2002-04-23 PRIOR PILING DATE: 2002-04-23
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OTHER INFORMATION: Synthetic construct
                                  ORGANISM: Artificial Sequence
                                                       TYPE: DNA
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Tuck, Stephen
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                                                                                                                                                                                                                                                                                                                                                      Karen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Polynucleotide containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90.5%; Score 19;
100.0%; Pred. No.
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0.065;
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RESULT 8
US-10-033-243-30
US-10-033-243-30
; Sequence 30, Application US/10033243
; Publication No. US20030049266A1
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                                                                                                                                               US-10-033-243-30
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CURRENT APPLICATION NUMBER: US/10/177,826

CURRENT FILING DATE: 2002-06-21

PRIOR APPLICATION NUMBER: 60/299,883

PRIOR FILING DATE: 2001-06-21

PRIOR APPLICATION NUMBER: 60/375,253

PRIOR FILING DATE: 2002-04-23

NUMBER OF SEQ ID NOS: 141
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LENGTH: 22
TYPE: DNA
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SEQ ID NO 30
LENGTH: 22
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Best Local Similarity
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Best Local Similarity Matches 19; Conserv
                                                                       Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/258,675
PRIOR FILING DATE: 2000-12-27
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APPLICANT: Dina, I
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APPLICANT: Tuck, Stephen
                                                                                                                                                                                                                   ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                              TYPE: DNA
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                                                                                                                                                                                 OTHER INFORMATION: Polynucleotide containing
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90.5%; Score 19; DB 15; Length 22; 100.0%; Pred. No. 0.064; tive 0; Mismatches 0; Indels
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US-10-176-883-36
                                                                                                      ; OTHER INFORMATION: Synthetic construct US-10-177-826-36
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                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/299,883
PRIOR FILING DATE: 2001-66-21
PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 36
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Publication No.
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Best Local Similarity
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                                   Matches
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APPLICANT: Dina, Dino
APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
TITLE OF INVENTION: METHODS OF USING THE SAME-I
FILE REPERENCE: 37882002000
CURRENT APPLICATION NUMBER: US/10/176,883
CURRENT FILING DATE: 2002-06-21
CURRENT FILING DATE: 2002-06-21
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PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
SOFTWARE: FastSEQ for Windows Version 4.0
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                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/177,826
CURRENT FILING DATE: 2002-06-21
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                                                                                                                                                    TYPE: DNA
ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
                                                                                                                                      FEATURE:
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TCGAACGTTCGAGATG 19
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Tuck, Stephen
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No. US20030199466A1
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                                                  100.0%;
                                                  76.2%; Score 16; 100.0%; Pred. No.
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                                                  DB 13; Length 18. . 4.1;
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Matches
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                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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                                                                                                                                                                                                                                                            ENGTH: 66
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                                                                GAACGTTCGAGATGAT 21
                                  GAACGTTCGAGATGAT 23
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APPLICANT: Fearon, Karen
APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
TITLE OF INVENTION: METHODS OF USING THE SAME-I
FILE REFERENCE: 377882002000
CURRENT APPLICATION NUMBER: US/10/176,883
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: 60/299,883
PRIOR APPLICATION NUMBER: 60/299,883
PRIOR APPLICATION NUMBER: 60/299,883
PRIOR PILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/375,253
PRIOR PILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 139
                                                                                                                    ; OTHER INFORMATION: Synthetic construct US-10-176-883-139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
US-10-033-243-14
IS-10-033-243-14
; Sequence 14, Application US/10033243
; Publication No. US20030049266A1
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CURRENT APPLICATION NUMBER: US/10/033,243

CURRENT FILING DATE: 2002-04-03

PRIOR APPLICATION NUMBER: 60/258,675

PRIOR APPLICATION NUMBER: 60/258,675

PRIOR PILING DATE: 2000-12-27

NUMBER OF SEQ ID NOS: 133
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  76.2%; Score 16; DB llarity 100.0%; Pred. No. 3. Conservative 0; Mismatches
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                                                           DB 13;
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RESULT 13 US-10-177-826-139

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                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: us 60/202,274
PRIOR FILING DATE: 2000-05-05
NUMBER OF SEQ ID NOS: 21
SOFTWARE: FASUSEQ for Windows Version 4.0
SEQ ID NO 21
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Best Local (
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Agents that Modulate DNA-PK Activity and TITLE OF INVENTION: Methods of Use Thereof FILE REFERENCE: 06510168US1
CURRENT APPLICATION NUMBER: US/09/848,986
CURRENT FILING DATE: 2001-05-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/299,883
PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
SOFTMARE: FastSEQ for Windows Version 4.0
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                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: us 60/262321 PRIOR FILING DATE: 2001-01-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Lois, Augusto F. APPLICANT: Takabayashi, Kenji
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TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
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                                                                                            Similarity
GAACGTTCGAGATGA 20
                                 GAACGTTCGAGATGA 20
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Tuck, Stephen
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                                                                         Conservative
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100.0%; F1
                                                                                        71.4%; Score 15; 100.0%; Pred. No.
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                                                                                        DB 13; Length 20; 16;
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RESULT 15

RESULT 17 US-09-802-686-2

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US-09-802-686-1
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CURRENT FILING DATE: 2003-03-13-11
PRIOR APPLICATION NUMBER: US 09/848,986
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/202,274
PRIOR APPLICATION NUMBER: US 60/262,321
PRIOR APPLICATION NUMBER: US 60/262,321
PRIOR APPLICATION NUMBER: US 60/262,321
PRIOR FILING DATE: 2001-01-17
NUMBER OF SEQ ID NOS: 21
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LENGTH: 22
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SEQ ID NO 21
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
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Best Local Similarity
Matches 15; Conserv
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                                                                              Best Local Similarity Matches 15; Conserv
                                                                                                                      Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Van Nest, Gary
TITLE OF INVENTION: METHODS OF PREVENTING AND TREATING
TITLE OF INVENTION: RESPIRATORY VIRAL INFECTION USING IMMUNOMODULATORY
TITLE OF INVENTION: POLYNICLEOTIDE SEQUENCES
FILE REFERENCE: 377882000900
                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/802,686
CURRENT FILING DATE: 2001-03-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Dynavax Technologies Corporation APPLICANT: Van Nest, Gary
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APPLICANT: LOIS, AUGUST
APPLICANT: TAKABAYASHI,
                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/188,583 PRIOR FILING DATE: 2000-03-10
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TITLE OF INVENTION: AGENTS THAT MODULATE DNA-PK ACTIVITY AND
TITLE OF INVENTION: METHODS OF USE THEREOF
                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 10
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                                                                                                                                                                                                  ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                               OTHER INFORMATION: Polynucleotide containing
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                                      6 GAACGITCGAGATGA 20
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                                                                                                 71.4%; Score 15; 100.0%; Pred. No.
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Pred. No.
                                                                                Mismatches
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                                                                                                                    DB 9; Length 22;
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US-09-802-685-2
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US-09-802-685-1
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; OTHER INFORMATION: Polynucleotide containing
US-09-802-686-2
                                                                                                                                                                                                                                                                                                                                                        US-09-802-685-1
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SEQ ID NO 2
LENGTH: 22
TYPE: DNA
ORGANISM: Artificial Sequence
GENERAL INFORMATION:
APPLICANT: Van Nest, Gary
APPLICANT: Eiden, Joseph J., Jr.
TITLE OF INVENTION: METHODS OF PREVENTING AND TREATING VIRAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/09802685 Patent No. US20020028784A1 GENERAL INFORMATION:
                                                                             Sequence 2, Application US/09802685 Patent No. US20020028784A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 12
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1
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Best Local S
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CURRENT FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: 60/188,583
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEQ ID NOS: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Van Nest, Gary
APPLICANT: Eiden, Joseph J., Jr.
TITLE OF INVENTION: METHODS OF PREVENTING AND TREATING VIRAL
TITLE OF INVENTION: INFECTIONS USING IMMUNOMODULATORY POLYNUCLEOTIDE SEQUENCES
FILE REFERENCE: 377882001600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: METHODS OF PREVENTING AND TREATING TITLE OF INVENTION: RESPIRATORY VIRAL INFECTION USING TITLE OF INVENTION: POLYMUCLEOTIDE SEQUENCES FILE REFERENCE: 377882000900
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CURRENT APPLICATION NUMBER: US/09/802,685
CURRENT FILING DATE: 2001-03-09
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                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Polynucleotide containing
                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
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                                                                                                                                                                                                                                                                                                Local Similarity
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; Pred. No. 16;
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16;
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CURRENT APPLICATION NUMBER: US/09/791,500
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 39
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 1
LENGTH: 22
TYPE: DNA
TYPE: DNA
ORDERINGS: Artificial Sequence
CURRENT APPLICATION NUMBER: US/09/802,376
CURRENT FILING DATE: 2001-03-09
FRIOR APPLICATION NUMBER: 600/188,557
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEO ID NOS: 11
SOFTMARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 1
LENGTH: 22
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US-09-802-376-1
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US-09-791-500-1
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APPLICANT: Raz, Eyal
APPLICANT: Rachmilewitz, Daniel
APPLICANT: Rachmilewitz, Daniel
TITLE OF INVENTION: Method for Treating Inflammatory Bowel
TITLE OF INVENTION: Disease and Other Forms of Gastrointestinal Inflammation.
FILE REFERENCE: 6510-202USI
FILE REFERENCE: 6510-202USI
                                                                                                                                                                                                                                             Sequence 1, Application US/09802376
Patent No. US20020055477A1
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Best Local Similarity
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CURRENT APPLICATION NUMBER: US/09/802,685
CURRENT FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: U.S. 60/188,302
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEQ ID NOS: 12
                                                                                                                                                    APPLICANT: Van Nest, Gary
APPLICANT: TUCK, Stephen
TITLE OF INVENTION: IMMUNOMODULATORY FORMULATIONS AND METHODS FOR USE THEREOF
FILE REFERENCE: 37788201700
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ORGANISM: Artificial Sequence
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100.0%; Pred. No.
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; OTHER INFORMATION:
US-09-802-370-1
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US-09-802-376-2
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                                                                                                            SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 1
LENGTH: 22
TYPE: DNA
ORGANISM: Artificial Sequence
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Query Match
Best Local Similarity
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SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 2
SEQ ID NO 2
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Best Local Similarity
Matches 15; Conserv
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Best Local
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APPLICANT: Eiden, Joseph J. Jr.
APPLICANT: Eiden, Joseph J. Jr.
TITLE OF INVENTION: WETHODS OF SUPPRESSING HEPATITIS VIRUS
TITLE OF INVENTION: INFECTION USING IMMUNOMODULATORY POLYN
FILE REFERENCE: 3778820010200
CURRENT PRICTON NUMBER: US/09/802,370
CURRENT FILING DATE: 2001-09-24
CRICK FILING DATE: 2001-09-24
PRIOR FILING DATE: 2001-09-24
RIOR FILING DATE: 2001-09-24
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CURRENT FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: 60/188,557
PRIOR FILING DATE: 2000-03-10
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APPLICANT: Tuck, Stephen
TITLE OF INVENTION: IMMUNOMODULATORY FORMULATIONS AND METHODS FOR USE THEREOF
FILE REFERENCE: 37788201700
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ORGANISM: Artificial Sequence
FEATURE:
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                                                                           Polynucleotide containing
 71.4%;
100.0%;
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100.0%; Pred. No.
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Pred.
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US-09-802-445-1
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US-09-802-370-2
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Matches
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1
LENGTH: 22
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APPLICANT: Van Nest, Gary
APPLICANT: Eiden, Joseph
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                                                                                    Query Match
Best Local Similarity
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TITLE OF INVENTION: METHODS OF REBUCING PAPILLOMAVIRUS INFECTION USING IMMUNOMODULATO.
TITLE OF INVENTION: POLYNUCLEOTIDE SEQUENCES
FILE REFERENCE: 377882001300
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CURRENT FILING DATE: 2001-09-24
PRIOR APPLICATION NUMBER: 60/188,301
PRIOR FILING DATE: 2000-03-10
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APPLICANT: Eiden, Joseph J. Jr.
TITLE OF INVENTION: METHODS OF SUPPRESSING HEPATITIS VIRUS
TITLE OF INVENTION: INFECTION USING IMMUNOMODULATORY POLYNUCLEOTIDE SEQUENCES
                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/188,265 PRIOR FILING DATE: 2000-03-10
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CURRENT FILING DATE: 2001-09-24
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ORGANISM: Artificial Sequence
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                                                                   71.4%; Score 15; DB 10;
100.0%; Pred. No. 16;
tive 0; Mismatches (
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US-09-820-484-1
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                                                                         Matches
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Patent No. US20020107212A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Van Nest, Gary
APPLICANT: Eiden, Joseph J. Jr.
TITLE OF INVENTION: METHODS OF REDUCING PAPILLOMAVIRUS INFECTION USING IMMUNOMODULATC
TITLE OF INVENTION: POLYNUCLECTIDE SEQUENCES
FILE REFERENCE: 377882001300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 2 LENGTH: 22
                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 2000-05-11
PRIOR APPLICATION NUMBER: US 60/215,895
PRIOR FILING DATE: 2000-07-05
                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 60/192,537
PRIOR FILING DATE: 2000-03-28
PRIOR APPLICATION NUMBER: US 60/203,567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Horner, Anthony A.
TITLE OF INVENTION: Method for Increasing a Cytotoxic T
TITLE OF INVENTION: Lymphocyte Response in vivo.
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CURRENT FILING DATE: 2001-09-24
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CURRENT FILING DATE: 2001-03-28
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                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS:
                                                                                                                                                                OTHER INFORMATION: Disulfide-linked phosphorothicate ISS-ODN NAME/KEY: modified base LOCATION: (1)...(1)
OTHER INFORMATION: disulfide thymine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial Sequence FEATURE:
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                                                                                                                                                                                                                                           ORGANISM: Artificial Sequence FEATURE:
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                                                                                                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                               ENGTH: 22
                                                                       Local Similarity 100.
mes 15; Conservative
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100.0%; Pre
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                                                                         Mismatches
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US-09-820-484-3
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US-09-828-505-1
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NUMBER OF SEQ ID NOS: 8

SOPTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 3

LENGTH: 22

TYPE: DNA

ORGANISM: Artificial Sequence
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Patent No. US20020142977A1
GENERAL INFORMATION:
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SEQ ID NO 1
LENGTH: 22
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Patent No. US20020142978A1
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Best Local Similarity
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Matches 15; Conserv
                                                                                                            Query Match
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                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/828,505
CURRENT FILING DATE: 2001-04-06
PRIOR APPLICATION NUMBER: 60/195,890
PRIOR FILING DATE: 2000-04-07
NUMBER OF SEQ ID NOS: 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/820,484
CURRENT FILING DATE: 2001-03-28
PRIOR APPLICATION NUMBER: US 60/192,537
PRIOR FILING DATE: 2000-03-28
PRIOR APPLICATION NUMBER: US 60/203,567
PRIOR FILING DATE: 2000-05-11
PRIOR FILING DATE: 2000-05-11
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APPLICANT: Nguyen, Minh-Duc
TITLE OF INVENTION: Synergistic Improvements
TITLE OF INVENTION: Polynucleotide Vaccines
FILE REFERENCE: 6510-203
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TITLE OF INVENTION: Method for Increasing a Cytotoxic
TITLE OF INVENTION: Lymphocyte Response in vivo.
FILE REFERENCE: 06510-188US1
                                                                               OTHER INFORMATION: Immunomodulatory nucleic acid sequence
Score 15; DB
; Pred. No. 16;
0; Mismatches
             16;
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APPLICANT: Assistance Publique - Hopitaux de Paris
APPLICANT: Institut National de la Sante et de la Recherche M
APPLICANT: Carpentier, Antoine
TITLE OF INVENTION: Use of Stabilised Oligonucleotides for Preparing A Medicament wit
TITLE OF INVENTION: Antitumor Activity
FILE REFERENCE: 267/246 US
CURRENT APPLICATION NUMBER: US/09/967,881
CURRENT TILING DATE: 2001-09-28
NUMBER OF SEQ ID NOS: 48
SOFTWARE: Patentin version 3.1
SEQ ID NO 2
LENGTH: 22
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE: INFORMATION: Oligodeoxynucleotide
US-09-967-881-2
RESULT 32
US-09-927-422A-2
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US-09-967-881-2
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1
LENGTH: 22
TYPE: DNA
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: BIODEGRADABLE IMMUNOMODULATORY
TITLE OF INVENTION: FORMULATIONS AND METHODS FOR USE THEREOF
FILE REFERENCE: 377862001420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Van Nest, Gary APPLICANT: Tuck, Stephen
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                                                                                                                                                                                                                                                    OTHER INFORMATION: Polynucleotide containing CG
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Dina, Dino
                                                                                                                                                       Conservative
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on, Karen L.
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                                                                                                                                                                       71.4%; Score 15; DB 11; Length 22; 100.0%; Pred. No. 16;
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US-09-927-884-1

Sequence 1, Application US/09927884 Publication No. US20030059773A1

GENERAL INFORMATION:

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CURRENT APPLICATION NUMBER: US/09/738,046A
CURRENT FILING DATE: 2000-12-15
NUMBER OF SEQ ID NOS: 3
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 22
TYPE: DNA
CEPATTER: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 3, Application US/09738046A Publication No. US20030054007A1 GENERAL INFORMATION:
APPLICANT: FELGNER, PHILIP L. APPLICANT: ZELPHATI, OLIVIER TITLE OF INVENTION: INTRACELLULAR PROTITILE OF INVENTION: COMPOSITIONS AND FILE REFERENCE: GTSYS.004A
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US-09-738-046A-3
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RESULT 34
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 22
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Best Local Similarity
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APPLICANT: Dina, Dino,
TITLE OF INVENTION: BIODEGRADABLE IMMUNOMODULATORY
TITLE OF INVENTION: FORMULATIONS AND METHODS FOR USE THEREOF
FILE REFERENCE: 377882001420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Van Nest, Gary APPLICANT: Tuck, Stephen
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                                                                                                                                                                                                                                            FEATURE:
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                                                                        GAACGTTCGAGATGA 20
                                                       GAACGTTCGAGATGA 22
                                                                                                                              Conservative
                                                                                                                              71.4%; Score 15;
100.0%; Pred. No.
tive 0; Mismatc
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AND METHODS OF US
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APPLICANT: DIA, DIAO

TITLE OF INVENTION: IMMUNOMODULATORY FORMULATIONS AND

TITLE OF INVENTION: METHODS FOR USE THEREOF

FILE REFERENCE: 377882001720

CURRENT APPLICATION NUMBER: US/09/927,884

CURRENT FILING DATE: 2001-08-10

PRIOR APPLICATION NUMBER: U.S. 09/802,376

PRIOR APPLICATION NUMBER: U.S. 60/188,557

PRIOR APPLICATION NUMBER: U.S. 60/188,557

PRIOR APPLICATION NUMBER: U.S. 60/188,557

PRIOR APPLICATION NUMBER: U.S. 60/188,557

PRIOR APPLICATION NUMBER: U.S. 60/188,557

PRIOR FILING DATE: 2000-03-10

NUMBER OF SEQ ID NOS: 14

SOSTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 2
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                                                                                US-09-802-359-1
                                                                                                     RESULT 36
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TITLE OF INVENTION: METHODS FOR USE THEREOR
FILE REFERENCE: 377882001720
CURRENT APPLICATION NUMBER: US/09/927,884
CURRENT FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: U.S. 09/802,376
PRIOR FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: U.S. 60/188,557
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEQ ID NOS: 14
SOFTWARE: FastSEQ for Windows Version 4.0
               Sequence 1, Application US/09802359 Publication No. US20030129251A1 GENERAL INFORMATION:
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Best Local :
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LENGTH: 22
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APPLICANT: Van Nest, Gary
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                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 22
TYPE: DNA
ORGANISM: Artificial Sequence
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nes 15; Conserv
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                                                                                                                                                                                                                                                  Conservative
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                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                   71.4%; Score 15; DB 11; Length 22; 100.0%; Pred. No. 16;
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US-09-967-464-19
; Sequence 19, Application US/09967464
; Publication No. US20030138453A1
; GENERAL INFORMATION:
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SEQ ID NO 1
LENGTH: 22
TYPE: DNA
ORGANISM: Artificial Sequence
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Best Local (
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Best Local Similarity
                                                                  APPLICANT:
APPLICANT:
                                                                                                              APPLICANT: O'Hagan, Derek
APPLICANT: Otten, Gillis
APPLICANT: Donnelly, John J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 2001-03-09
PRIOR APPLICATION NUMBER: 60/188,303
PRIOR FILING DATE: 2000-03-10
NUMBER OF SEQ ID NOS: 11
COPTUBRIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: IMMUNOMODULATORY FORMULATIONS AND METHODS FOR USE THEREOF FILE REFERENCE: 37788201400
CURRENT APPLICATION NUMBER: US/09/802,359
CURRENT FILING DATE: 2001-03-09
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CURRENT FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: 60/188,303
PRIOR FILING DATE: 2000-03-10
                                                                                                   APPLICANT:
                                                    APPLICANT:
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                                   APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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T: Dubensky, Jr., Thomas W.
INVENTION: MICROPARTICLES FOR DELIVERY OF HETEROLOGOUS NUCLEIC ACIDS
SRENCE: PP16269.004
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15; Conserv
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                                               Barnett, Susan
Singh, Mamohan
Ulmer, Jeffrey
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Pred. No.
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16;
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US-10-214-799-2
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                                                                                                                                                                                                                                                         RESULT 40
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Best Local Similarity 100.
---- 15; Conservative
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SEQ ID NO 2
LENGTH: 22
TYPE: DNA
ORGANISM: Artificial Sequence
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Publication No. US20030133988A1
GENERAL INFORMATION:
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SEQ ID NO 19
LENGTH: 22
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APPLICANT: Cho, Hearn Jay
APPLICANT: Richman, Douglas
APPLICANT: Horner, Anthony A.
TITLE OF INVENTION: Method for Increasing a Cytotoxic T
TITLE OF INVENTION: Lymphocyte Response in vivo.
FILE REFERENCE: UCAL-188DIV
CURRENT APPLICATION UNMEER: US/10/340,275
CURRENT FILING DATE: 2003-01-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/236,105
PRIOR FILING DATE: 2000-09-28
PRIOR APPLICATION NUMBER: 60/315,905
PRIOR FILING DATE: 2001-08-30
NUMBER OF SEQ ID NOS: 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 60/335,263
PRIOR FILING DATE: 2001-10-25
NUMBER OF SEQ ID NOS: 2
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CURRENT FILING DATE: 2002-08-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Fearon, Karen L. and Dina, Dino TITLE OF INVENTION: IMMUNOMODULATORY COMPOSITIONS, TITLE OF INVENTION: FORMULATIONS, AND METHODS OF FILE REFERENCE: 377882003100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US 60/310,743 PRIOR FILING DATE: 2001-08-07
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CURRENT FILING DATE: 2002-04-11
                                                                                                                                                        APPLICANT: Raz, Eyal
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100.0%; Pred. No.
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100.0%; Pred. No.
Live 0; Mismatcl
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                                                                                                                                   OTHER INFORMATION: phosphorothicate ISS-ODN US-10-340-275-3
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US-10-340-275-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Raz, Eyal
APPLICANT: Cho, Hea
APPLICANT: Richman,
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SEQ ID NO 1
                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 60/215,895
PRIOR FILING DATE: 2000-07-05
NUMBER OF SEQ ID NOS: 8
SOFTWARE: FastSEQ for Windows Version 4
SEQ ID NO 3
LENGTH: 22
                                                                 Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Publication No.
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Best Local !
                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/10/340,275
CURRENT FILING DATE: 2003-01-10
PRIOR APPLICATION NUMBER: 09/820,484
PRIOR FILING DATE: 2001-03-28
PRIOR APPLICATION NUMBER: US 60/192,537
PRIOR FILING DATE: 2000-03-28
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SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 60/203,567
PRIOR FILING DATE: 2000-05-11
PRIOR APPLICATION NUMBER: US 60/215,895
PRIOR FILING DATE: 2000-07-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Horner, Anthony A.
TITLE OF INVENTION: Method for Increasing a Cytotoxic TITLE OF INVENTION: Lymphocyte Response in vivo.
FILE REFERENCE: UCAL-188DIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 60/192,537 PRIOR FILING DATE: 2000-03-28
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PRIOR FILING DATE: 2001-03-28
                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 60/203,567 PRIOR FILING DATE: 2000-05-11
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LOCATION: (1)...(1)
OTHER INFORMATION: disulfide thymine
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                                                                                                                                                                             TYPE: DNA ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
                                                                                                                                                                    FEATURE:
                                                                                 Local
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                               6 GAACGITCGAGATGA 20
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No. US20030143213A1
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                                                                 Conservative
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                                                               71.4%; Score 15;
100.0%; Pred. No.
tive 0; Mismatc
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pred. No.
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                                                               SEQ ID NO 3
LENGTH: 22
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Best Local (
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Publication No. US20030147870A1
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                           CURRENT FILING DATE: 2003-01-10
PRIOR APPLICATION NUMBER: 09/820,484
PRIOR FILING DATE: 2001-03-28
PRIOR APPLICATION NUMBER: US 60/192,537
                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Richman, Douglas
APPLICANT: Horner, Anthony A.
TITLE OF INVENTION: Method for Increasing a Cytotoxic
TITLE OF INVENTION: Lymphocyte Response in vivo.
FILE REFERENCE: UCAL-188CON
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APPLICANT: Richman, Douglas
APPLICANT: Horner, Anthony A.
TITLE OF INVENTION: Method for Increasing a Cytotoxic T
TITLE OF INVENTION: Lymphocyte Response in vivo.
FILE REFERENCE: UCAL-188CON
                                                                                                                              PRIOR APPLICATION NUMBER: US 60/215,895
PRIOR FILING DATE: 2000-07-05
NUMBER OF SEQ ID NOS: 8
                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/10/339,885
CURRENT FILING DATE: 2003-01-10
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                                                                                                          SOFTWARE: FastSEQ for Windows Version 4.0
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OTHER INFORMATION: disulfide thymine
                    TYPE: DNA ORGANISM: Artificial Sequence
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APPLICATION NUMBER: US 60/203,567
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FILING DATE: 2000-07-05
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No. US20030147870A1
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US-10-176-883-2
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                                                                                   SEQ ID NO 2
LENGTH: 22
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LENGTH: 22
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Best Local :
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TITLE OF INVENTION: Agents that Modulate DNA-PK Activity and
TITLE OF INVENTION: Methods of Use Thereof
                                                                                                                                                                                                                                                           TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND TITLE OF INVENTION: METHODS OF USING THE SAME-I FILE REFERENCE: 377882002000

CURRENT APPLICATION NUMBER: US/10/176,883

CURRENT FILING DATE: 2002-06-21
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PRIOR FILING DATE: 2000-05-05
NUMBER OF SEQ ID NOS: 21
SOFTWARE: FASTSEQ for Windows Version 4.0
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CURRENT APPLICATION NUMBER: US/09/848,986
CURRENT FILING DATE: 2001-05-03
                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
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                                                                                                                              SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/299,883 PRIOR FILING DATE: 2001-06-21
                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
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OTHER INFORMATION: Synthetic construct
                      FEATURE:
                                      ORGANISM: Artificial Sequence
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15; Conserv
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100.0%; Pred. No.
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16;
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US-10-176-883-24
; OTHER INFORMATION: Synthetic construct US-10-176-883-34
                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-176-883-34
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                                                                             SEQ ID NO 34
LENGTH: 22
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PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 24
LENGTH: 22
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Publication No.
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Best Local Similarity
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Publication No.
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APPLICANT: Tuck, Stephen
TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
TITLE OF INVENTION: METHODS OF USING THE SAME-I
FILE REFERENCE: 377882002000
                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/10/176,883
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: 60/299,883
PRIOR FILING DATE: 2001-06-21
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                                                                                                                  PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
SOFTWARE: FastSEQ for Windows Version 4.0
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CURRENT FILING DATE: 2002-06-21
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                                         TYPE: DNA ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
FEATURE:
                              FEATURE:
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Tuck, Stephen
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                                                                                                                                                                                                                                                                                                                                                                                  Application US/10176883
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93.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 15;
Pred. No.
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RESULT 49
US-10-176-883-79
US-10-176-883-79
Sequence 79, Application US/10176883
; Publication No. US20030175731A1
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US-10-176-883-44
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Best Local Similarity
Matches 15; Conserv
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                                                                                                SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 79
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SEQ ID NO 44
LENGTH: 22
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                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/176,883
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: 60/299,883
PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
                                                                                                                                                                                                                                                                       APPLICANT: Fearon, Karen
APPLICANT: Dina, Dino
APPLICANT: Dina, Dino
APPLICANT: TULK, Stephen
TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
TITLE OF INVENTION: METHODS OF USING THE SAME-I
FILE REFERENCE: 377882002000
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CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: 60/299,883
PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
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APPLICANT: Tuck, Stephen
TITLE OF INVENTION: CHIMBERIC IMMUNOMODULATORY COMPOUNDS
TITLE OF INVENTION: METHODS OF USING THE SAME-I
FILE REFERENCE: 377882002000
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                    TYPE: DNA ORGANISM: Artificial Sequence
OTHER INFORMATION: Synthetic construct
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                FEATURE:
                                                                           LENGTH:
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100.0%; Pred. No.
cive 0; Mismatc
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Publication No.
                                   SEQ ID NO 85
LENGTH: 22
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Best Local Similarity
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APPLICANT: Tuck, Stephen
TITLE OF INVENTION: CHIMMERIC IMMUNOMODULATORY COMPOUNDS AND
TITLE OF INVENTION: METHODS OF USING THE SAME-I
FILE REFERENCE: 377882002000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/299,883
PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/375,253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: 377882002000
CURRENT APPLICATION NUMBER: US/10/176,883
CURRENT FILING DATE: 2002-06-21
                                                                    PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                     PRIOR APPLICATION NUMBER: 60/299,883 PRIOR FILING DATE: 2001-06-21
                                                                                                                                                                       CURRENT FILING DATE: 2002-06-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND TITLE OF INVENTION: METHODS OF USING THE SAME-I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Fearon, Karen
APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
                                                                                                                                                                                                                                                                                             APPLICANT: Fearon, Karen
TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE: OTHER INFORMATION: Synthetic construct
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ORGANISM: Artificial Sequence
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No. US20030175731A1
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Pred. No.
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16;
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US-10-176-883-140
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SOFTWARE: Fas
SEQ ID NO 140
LENGTH: 22
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Best Local Similarity
Matches 15; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: 377882002000

CURRENT APPLICATION NUMBER: US/10/176,883

CURRENT FILING DATE: 2002-06-21

PRIOR APPLICATION NUMBER: 60/299,883

PRIOR FILING DATE: 2001-06-21

PRIOR FILING DATE: 2001-06-21
                                                                                                                                             APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS
TITLE OF INVENTION: METHODS OF USING THE SAME-I
FILE REFERENCE: 377882002000
CURRENT PEPLICATION NUMBER: US/10/176,883
CURRENT FILING DATE: 2002-06-21
                                                       PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/375,253 PRIOR FILING DATE: 2002-04-23
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                                                                                                        PRIOR APPLICATION NUMBER: 60/299,883 PRIOR FILING DATE: 2001-06-21
                                                                                                                                                                                                                                                                           APPLICANT: Fearon,
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ORGANISM: Artificial Sequence
FEATURE:
FEATURE:
FEATURE:
FORTHWENT ON SUNTHELIC
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                                        FastSEQ for Windows Version 4.0
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Tuck, Stephen
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US-10-176-883-141
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                                                                                                                                                                 Sequence 1, Application US/10412151
Publication No. US20030176389A1
GENERAL INFORMATION:
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Best Local
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APPLICANT: Raz, Eyal
APPLICANT: Rachmilewitz, Daniel
TITLE OF INVENTION: Method for Treating Inflammatory Bowel
TITLE OF INVENTION: Disease and Other Forms of Gastrointestinal Inflammation.
FILE REFERENCE: UCAL-202CON
CURRENT APPLICATION NUMBER: US/10/412,151
CURRENT FILING DATE: 2003-04-11
PRIOR APPLICATION NUMBER: 09/791,500
PRIOR FILING DATE: 2001-02-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/299, 883
PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS TITLE OF INVENTION: METHODS OF USING THE SAME-I FILE REFERENCE: 377882002000 CURRENT APPLICATION NUMBER: US/10/176,883 CURRENT FILING DATE: 2002-06-21
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TYPE: DNA
ORGANISM: Artificial Sequence
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NAME/KEY: modified_base
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Tuck, Stephen
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US-10-177-826-24; Sequence 24, Application US/10177826; Publication No. US20030199466A1; GENERAL INFORMATION:
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US-10-177-826-2
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APPLICANT: Fearon, Karen
APPLICANT: Dina, Dino
APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
TITLE OF INVENTION: CHIMBERIC IMMUNOMODULATORY COMPOUNDS AND
TITLE OF INVENTION: METHODS OF USING THE SAME-II
FILE REFERENCE: 377882002001
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SEQ ID NO 2
LENGTH: 22
TYPE: DNA
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Publication No.
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LENGTH: 22
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                                 APPLICANT: Fearon, Karen
APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
TITLE OF INVENTION: CHEMERIC IMMUNOMODULATORY COMPOUNDS AND
TITLE OF INVENTION: METHODS OF USING THE SAME-II
FILE REFERENCE: 377882002001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/177,826
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: 60/299,883
PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
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NUMBER OF SEQ ID NOS: 39
SOFTWARE: FastSEQ for Windows Version 4.0
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CURRENT APPLICATION NUMBER: US/10/177,826
CURRENT FILING DATE: 2002-06-21
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OTHER INFORMATION: Synthetic construct
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60/299,883

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RESULT 59
US-10-177-826-44
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PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 34
LENGTH: 22
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Publication No. US20030199466A1
GENERAL INFORMATION:
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Best Local Similarity
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     APPLICANT: Fearon, Karen
APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
TITLE OF INVENTION: METHODS OF USING THE SAME-II
FILE REFERENCE: 377882002001
CURRENT APPLICATION NUMBER: US/10/177,826
CURRENT FILING DATE: 2002-06-21
CCURRENT FILING DATE: 2002-06-21
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Best Local Similarity
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CURRENT APPLICATION NUMBER: US/10/177,826
CURRENT FILING DATE: 2002-66-21
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APPLICANT: Dina, E
APPLICANT: Tuck, S
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NUMBER OF SEQ ID NOS: 141
SOFTWARE: FastSEQ for Windows Version
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PRIOR APPLICATION NUMBER: 60/299,883
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No. US20030199466A1
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Tuck, Stephen
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93.3%;
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100.0%; Pred. No.
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Pred. No.
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US-10-177-826-84
Sequence 84, Application US/10177826
Publication No. US20030199466A1
GENERAL INFORMATION:
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US-10-177-826-79
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                                                                                                                                                                                                                                                                    RESULT 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 79
LENGTH: 22
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SEQ ID NO 44
LENGTH: 22
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Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                         Best
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APPLICANT: Fearon, Karen
APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
APPLICANT: Tuck, Stephen
TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
TITLE OF INVENTION: METHODS OF USING THE SAME-II
FILE REFERENCE: 377882002001
CURRENT APPLICATION NUMBER: US/10/177,826
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: 60/299,883
PRIOR FILING DATE: 2001-06-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS TITLE OF INVENTION: METHODS OF USING THE SAME-II FILE REFERENCE: 377882002001 CURRENT APPLICATION NUMBER: US/10/177,826 CURRENT FILING DATE: 2002-06-21
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PRIOR APPLICATION NUMBER: 60/-
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/299,883
PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/375,253
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Synthetic construct
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                                                                                                                                                                                                                                                                                                                                                                                                                     71.4%;
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16;
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RESULT 63
US-10-177-826-134
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; OTHER INFORMATION: n = 5-bromocytosine US-10-177-826-85
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 85
LENGTH: 22
                                                                       Sequence 134, Application US/10177826
Publication No. US20030199466A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 85, Application No. US20 GENERAL INFORMATION:
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Best Local Similarity
                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                          Matches
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Best Local Similarity
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APPLICANT: Fearon, Karen APPLICANT: Dina, Dino APPLICANT: Tuck, Stephen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
SOPTWARE: FASTSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/375,253 PRIOR FILING DATE: 2002-04-23
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APPLICANT: Tuck, Stephen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Fearon, Karen
                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE: OTHER INFORMATION: Synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: Artificial Sequence
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No. US20030199466A1
                                                                                                                                                                                                                                                         Conservative
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                                                                                                                                                                                                                                                                        Score 15; Pred. No.
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APPLICANT: Fearon, Karen
APPLICANT: Dina, Dino
APPLICANT: Dina, Dino
APPLICANT: Tuck, Stephen
ITILE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
TITLE OF INVENTION: METHODS OF USING THE SAME-II
FILE REFERENCE: 377882002001
CURRENT APPLICATION NUMBER: US/10/177,826
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: 60/299,883
PRIOR APPLICATION NUMBER: 60/299,883
PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
RESULT 65
US-10-177-826-141
; Sequence 141, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
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US-10-177-826-140
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CURRENT APPLICATION NUMBER: US/10/177,826

CURRENT FILING DATE: 2002-06-21

PRIOR APPLICATION NUMBER: 60/299,883

PRIOR FILING DATE: 2001-06-21

PRIOR APPLICATION NUMBER: 60/375,253

PRIOR FILING DATE: 2002-04-23

NUMBER OF SEQ ID NOS: 1141

COMMENT SECTION OF THE WINDOWS VERSION 4.0
                                                                                                                                                                                                                          Query Match
Best Local S
Matches 15
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SEQ ID NO 140
LENGTH: 22
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Publication No. US20030199466A1
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SEQ ID NO 134
LENGTH: 22
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                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: n = thymine attached to a reactive linking group
                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY: modified_base
LOCATION: 1
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                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Artificial Sequence FEATURE:
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16;
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Fearon, Karen

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RESULT 67
US-10-357-760-2
; Sequence 2, Application US/10357760
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                                                                                                                                                                                                                                                      ; OTHER INFORMATION: Polynucleotide containing CG US-10-357-760-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-357-760-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION UNMBER: 60/299,883
PRIOR FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/375,253
PRIOR FILING DATE: 2002-04-23
NUMBER OF SEQ ID NOS: 141
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 141
                                                                                                                                                                           Query Match
Best Local S
Matches 15
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: 377882001200
CURRENT APPLICATION NUMBER: US/10/357,760
CURRENT FILING DATE: 2003-02-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Van Nest, Gary
APPLICANT: Eiden, Joseph J. Jr.
TITLE OF INVENTION: METHODS OF SUPPRESSING HEPATITIS VIRUS
TITLE OF INVENTION: INFECTION USING IMMUNOMODULATORY POLYNUCLEOTIDE SEQUENCES
                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 2000-03-10 NUMBER OF SEQ ID NOS: 8
                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 2001-09-24
PRIOR APPLICATION NUMBER: 60/188,301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT FILING DATE: 2002-06-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US/09/802,370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND TITLE OF INVENTION: METHODS OF USING THE SAME-II
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ORGANISM: Artificial Sequence
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Tuck, Stephen
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100.0%; Pr
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100.0%; Pred. No. 16,
:ive 0; Mismatches
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                                                                                                                                                                                             DB 13; Length 22; 16;
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RESULT 69
US-10-033-243-2
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US-10-056-420-4
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                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/056,420
CURRENT FILING DATE: 2002-01-24
PRIOR APPLICATION NUMBER: US 60/264,476
PRIOR FILING DATE: 2001-01-26
NUMBER OF SEQ ID NOS: 5
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4
                                                                                                                                                    Query Match
Best Local Similarity
Matches 15; Conserv
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Best Local
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LENGTH: 22
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TITLE OF INVENTION: METHODS OF SUPPRESSING HEPATITIS VIRUS
TITLE OF INVENTION: INFECTION USING IMMUNOMODULATORY POLYN
FILE REFERENCE: 377882001200
CURRENT APPLICATION NUMBER: US/10/357,760
CURRENT FILING DATE: 2003-02-03
PRIOR APPLICATION NUMBER: US/09/802,370
PRIOR PILING DATE: 2001-09-24
PRIOR APPLICATION NUMBER: 60/188,301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: Method For Treating an HIV-Infected
TITLE OF INVENTION: Individual By Combining Immunization With Structured
TITLE OF INVENTION: Interruption of Anti-Retroviral Treatment
FILE REFERENCE: P-IM 5158
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ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
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100.0%; Pred. No.
tive 0; Mismatc
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100.0%; Pred. No. 16
tive 0; Mismatches
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Sequence 2, Application US/10033243
Publication No. US20030049266A1
GENERAL INFORMATION:
APPLICANT: FEARON, Karen L.
APPLICANT: DINA, Dino

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RESULT 71
US-10-033-243-22
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SEQ ID NO 2
LENGTH: 22
TYPE: DNA
ORGANISM: Artificial Sequence
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Best Local Similarity
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SOFTWARE: FBBUSEQ for Windows Version 4.0
SEQ ID NO 12
LENGTH: 22
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Best Local Similarity
APPLICANT: FEARON, KAREN L.
APPLICANT: DINA, DINO
TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
TITLE OF INVENTION: METHODS OF USING THE SAME
FILE REFERENCE: 377882001800
CURRENT APPLICATION NUMBER: US/10/033,243
CURRENT FILING DATE: 2002-04-03
PRIOR APPLICATION NUMBER: 60/258,675
PRIOR FILING DATE: 2000-12-27
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CURRENT APPLICATION NUMBER: US/10/033,243
CURRENT FILING DATE: 2002-04-03
PRIOR APPLICATION NUMBER: 60/258,675
PRIOR FILING DATE: 2000-12-27
NUMBER OF SEQ ID NOS: 133
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Polynucleotide containing
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Pred. No.
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RESULT 73
US-10-033-243-45
US-10-033-243-45
; Sequence 45, Application US/10033243
; Publication No. US20030049266A1
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US-10-033-243-40
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SEQ ID NO 22
LENGTH: 22
                                                     SOFTWARE: FastSEQ for Windows Version SEQ ID NO 45 LENGTH: 22
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SEQ ID NO 40
LENGTH: 22
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Best Local Similarity
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Best Local Similarity 100.0%; F
Matches 15; Conservative 0;
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                                                                                                                        APPLICANT: FEARON, Karen L.
APPLICANT: DINA, DINA,
TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
TITLE OF INVENTION: METHODS OF USING THE SAME
FILE REFERENCE: 377882001800
CURRENT APPLICATION NUMBER: US/10/033,243
CURRENT FILING DATE: 2002-04-03
PRIOR APPLICATION NUMBER: 60/258,675
PRIOR APPLICATION NUMBER: 60/258,675
PRIOR FILING DATE: 2000-12-27
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APPLICANT: DINA, DINO
TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
TITLE OF INVENTION: METHODS OF USING THE SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILE REFERENCE: 377882001800
CURRENT APPLICATION NUMBER: US/10/033,243
CURRENT FILING DATE: 2002-04-03
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NUMBER OF SEQ ID NOS: 133
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                                                                                                                  NUMBER OF SEQ ID NOS: 133
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ORGANISM: Artificial Sequence
FEATURE:
                  ORGANISM: Artificial Sequence
                                      TYPE: DNA
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; Pred. No.
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RESULT 75
US-10-033-243-59
; Sequence 59, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
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; OTHER INFORMATION: n = 5-bromocytosine US-10-033-243-46
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US-10-033-243-46
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NUMBER OF SEQ ID NOS: 133
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 59
LENGTH: 22
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 46
LENGTH: 22
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Publication No. US20030049266A1
GENERAL INFORMATION:
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                                                                         TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND TITLE OF INVENTION: METHODS OF USING THE SAME FILE REFERENCE: 377882001800

CURRENT APPLICATION NUMBER: US/10/033,243

CURRENT FILING DATE: 2002-04-03

PRIOR APPLICATION NUMBER: 60/258,675

PRIOR FILING DATE: 2000-12-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/10/033,243
CURRENT FILING DATE: 2002-04-03
PRIOR APPLICATION NUMBER: 60/258,675
PRIOR FILING DATE: 2000-12-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND TITLE OF INVENTION: METHODS OF USING THE SAME FILE REFERENCE: 377882001800
                                                                                                                                                                                                            APPLICANT: FEARON, Karen L. APPLICANT: DINA, Dino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: FEARON, Karen L. APPLICANT: DINA, Dino
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REATURE: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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ORGANISM: Artificial Sequence

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; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-59

Query Match
Best Local Similarity 100.0%; Pred. No. 16;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps
Qy 6 GAACGTTCGAGATGA 20
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Sequence 2448, Ap
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Sequence 2557, Ap
Sequence 5559, Ap
Sequence 553, App
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Sequence 31, A
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US-09-235-742-19

Sequence 19, Appli Patent No. 6498148

Application US/09235742

ALIGNMENTS

GENERAL INFORMATION:

FILE REFERENCE: 6510-170CON4

CURRENT APPLICATION NUMBER: US/09/235,742

CURRENT FILING DATE: 1999-01-21

EARLIER APPLICATION NUMBER: 08/927,120

EARLIER APPLICATION NUMBER: 08/593,554

EARLIER FILING DATE: 1996-01-30

EARLIER APPLICATION NUMBER: 08/725,968

EARLIER APPLICATION NUMBER: 08/725,968

EARLIER APPLICATION NUMBER: 08/725,968

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APPLICANT: Raz, Eyal
TITLE OF INVENTION: Immunization-Free Methods for Treating
TITLE OF INVENTION: Antigen-Stimulated Inflammation in a Mammalian Host a
TITLE OF INVENTION: Shifting the Host's Antigen Immune Responsiveness to
TITLE OF INVENTION: Phenotype
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mammalian Host and
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CURRENT FILING DATE: 2001-03-28
PRIOR APPLICATION NUMBER: US 60/192,537
PRIOR FILING DATE: 2000-03-28
PRIOR APPLICATION NUMBER: US 60/203,567
PRIOR FILING DATE: 2000-05-1
PRIOR APPLICATION NUMBER: US 60/203,567
PRIOR APPLICATION NUMBER: US 60/215,895
PRIOR FILING DATE: 2000-07-05
NUMBER OF SEQ ID NOS: 8
SOPTWARE: FASUSEQ for Windows Version 4.0
SEQ ID NO 1
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PRIOR APPLICATION NUMBER: US 60/192,537
PRIOR APPLICATION NUMBER: US 60/192,537
PRIOR PRILING DATE: 2000-03-28
PRIOR FILING DATE: 2000-05-11
PRIOR PPLICATION NUMBER: US 60/203,567
PRIOR FILING DATE: 2000-05-11
PRIOR PPLICATION NUMBER: US 60/215,895
PRIOR FILING DATE: 2000-07-05
NUMBER OF SEQ ID NOS: 8
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 3, Patent No.
                                                                                                                                                                     SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       patent No. 653406
  Query Match
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APPLICANT:
APPLICANT:
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APPLICANT: Richman, Douglas
APPLICANT: Horner, Anthony A.
TITLE OF INVENTION: Method for Increasing a Cytotoxic
TITLE OF INVENTION: Lymphocyte Response in vivo.
FILE REFERENCE: 06510-188US1
                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Method for Increasing TITLE OF INVENTION: Lymphocyte Response FILE REFERENCE: 06510-188US1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Raz, Eyal APPLICANT: Cho, Hea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Raz, Eyal
                                                                                                       TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
OTHER INFORMATION: Disulfide-linked phosphorothioate ISS-ODN
NAME/KEY: modified base
LOCATION: (1)...(1)
OCHER INFORMATION: disulfide thymine
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TYPE: DNA
ORGANISM: Artificial Sequence
                                                             OTHER INFORMATION: phosphorothioate ISS-ODN
                                                                                     FEATURE:
                                                                                                                                               ENGTH: 22
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5. 6534062
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Richman, Douglas
Horner, Anthony A.
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                                                                                                                                                                                                                                                                                                                                                                                                                              Method for Increasing a Cytotoxic Lymphocyte Response in vivo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  71.4%; Score 15;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>.</u>.
  Score 15;
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FILE REFERENCE: 30448.64US01
CURRENT APPLICATION NUMBER: US/09/347,343A
CURRENT FILING DATE: 1999-07-02
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 3:
SEQ ID NO 3:
LENGTH: 22
TYPE: DNA
ORGANISM: synthetic oligonucleotide
US-09-347-343-32

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GAACGTTCGAGATGA 20

GAACGTTCGAGATGA 22

Query Match Best Local Similarity Watches 15; Conserva

Conservative

71.4%; Score 15; 100.0%; Pred. No. tive 0; Mismatc

DB 4;

Length 22;

Mismatches

0,

Indels

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OTHER INFORMATION: Recombinant or Synthetic Sequence US-09-235-742-19

NUMBER OF SEQ ID NOS: 20 SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 19 LENGTH: 22

TYPE: DNA ORGANISM: Artificial Sequence

FEATURE:

EARLIER APPLICATION NUMBER: 60/028,118 EARLIER FILING DATE: 1996-10-11

US-09-347-343-32

Sequence 32, Application to, Color Patent No. 6514948

GENERAL INFORMATION:
APPLICANT: RAZ, Byal R.
APPLICANT: KOBAYASHI, Hiroko
TITLE OF INVENTION: METHOD FOR ENHANCING AN IMMUNE RESPONSE

RESULT 2

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Query Match
Best Local Similarity
Matches 15; Conser

GAACGTTCGAGATGA 20

Conservative

Mismatches

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Indels

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71.4%; Score 15; 100.0%; Pred. No. ٥,

DB 4;

Length 22;

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US-09-774-403A-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 6
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                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 10, Application US/08776251 Patent No. 6025340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
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PRIOR FILING DATE: 2000-01-31
NUMBER OF SEQ ID NOS: 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: UCAL166
CURRENT APPLICATION NUMBER: US/09/774,403A
CURRENT FILING DATE: 2002-04-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Dennis Carson
TITLE OF INVENTION: Immunomodulatory Polynucleotides in
TITLE OF INVENTION: Treatment of Infection by an Intracellular Pathogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: FastSEQ for Windows Version 4.0 EQ ID NO 1
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TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0
                                                          FILING DATE: 31-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/GB95/01782
                                                                                                      SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/776,251
                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                              PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                        CITY: Arlington
STATE: Virginia
                                                                                                                                                                                                                                                                        STREET:
                                                                                                                                                                                                                                                                                                                                           PPLICANT: Marais, Richard
TLE OF INVENTION: Surfac
                                                                                                                                                                                                                            COUNTRY:
                                                FILING DATE:
                                                                                                                                                                                                                                                                                          ADDRESSEE:
APPLICATION NUMBER: GB 9415167.7 FILING DATE: 27-JUL-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION:
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Antonio Catanzaro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tomoko Hayashi
                                                                                                                                                                                                                                                                           1100 No.
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                                                                                                                                                                                                                                                                                                                                                                        Springer, Caroline J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                    Nixon & Vanderhye
00 No. 6025340th Glebe Road, 8th Floor
                                               27-JUL-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Immunomodulatory sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Pred. No. 2.1; tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     71.4%;
                                                                                                                                                                                                                                                                                                                                        Surface expression of enzyme in gene directed prodrug therapy
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2.1;
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; MOLECULE TYPE:
US-08-776-251-10
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US-08-776-251-10
                                                                          Query Match
Best Local :
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Best Local Similarity
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REFERENCE/DOCKET NUMBER:
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                               NAME: Arthur R. Crawford
REGISTRATION NUMBER: 25,:
REFERENCE/DOCKET NUMBER:
INFORMATION FOR SEQ ID NO: 1
                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9415167.7
PILING DATE: 27-JUL-1994
                                                                                                                                                                                                                                                                                     FILING DATE: 27-JUL-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 816 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/GB95/01782
FILING DATE: 27-JUL-1995
                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Patentin Rel-
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 31-JAN-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Springer, Carol APPLICANT: Marais, Richard TITLE OF INVENTION: Surfac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 816 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)
                                                                         Local Similarity
                                                                                                                                                                  STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Arlington
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 TCGAACGTTCGAGA 788
                              TCGAACGTTCGAGA 17
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1100 No. 6025340th Glebe Road, 8th Floor
                                                            Conservative
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100.0%;
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100.0%;
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Pred. No.
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                                                            Mismatches
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                                                                      US-09-060-756-260
                                                                                         RESULT 10
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                  GENERAL
                                Sequence 260, Application US/09060756 Patent No. 6183957
                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 1
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APPLICANT: FLEISCHMAN, Robert D.
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Best Local :
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Best Local Similarity
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Patent No. 6294328
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: WHITE, Owen R.
APPLICANT: WRASER, Claire M.
APPLICANT: VENTER, John C.
TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN ITITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 24366-20007.00
CURRENT APPLICATION NUMBER: US/99/103,840A
CURRENT FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
APPLICANT: Cole, Stewart
                                                                                                                                                                                                                                                                                              -09-103-840A-1
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APPLICANT: VENTER, John C.
TITLE OF INVENTION: DNA SEQUENCES FOR STRATITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 24366-20007.00
CURRENT FILING DATE: 1998-06-24
CURRENT FILING DATE: 1998-06-24
CURRENT FILING DATE: 1998-06-24
CURRENT FILING DATE: 1998-06-24
CURRENT FILING DATE: 1998-06-24
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OTHER INFORMATION: "n" bases at various positions throughout the sequence
OTHER INFORMATION: represent a, t, c or g
                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Mycobacterium tuberculosis
OTHER INFORMATION: H37Rv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Mycobacterium tuberculosis FEATURE:
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                 INFORMATION:
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                                                                                                                                                                                                                      Conservative
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APPLICANT: Buchrieser-Brosch, Roland
APPLICANT: Gordon, Stephen
APPLICANT: Gordon, Stephen
APPLICANT: Billault, Alain
TITLE OF INVENTION: METHOD FOR ISOLATING A POLYNUCLEOTIDE OF INTEREST FROM
TITLE OF INVENTION: THE GENOME OF A MYCOBACTERIM USING A BAC-BASED DNA
TITLE OF INVENTION: THE GENOME OF A MYCOBACTERIM USING A BAC-BASED DNA
TITLE OF INVENTION: LIBRARY APPLICATION TO THE DETECTION OF MYCOBACTERIA
FILE REFERENCE: 3495-0169
CURRENT APPLICATION NUMBER: US/09/060,756
CURRENT FILING DATE: 1998-04-16
NUMBER OF SEQ ID NOS: 743
SOPTWARE: PatentIn Ver. 2.0
SEQ ID NO 260
LENGTH: 321
TYPE: DNA
ORGANISM: Mycobacterium tuberculosis
FRATURE.
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                                                                                                                                            RESULT 12
US-09-670-314-260
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; OTHER INFORMATION: anti-Rh(D)
US-09-240-274-197
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LENGTH: 321
TYPE: DNA
                                                                                 GENERAL INFORMATION:
                                                                                                    Sequence 260, Application US/09670314
Patent No. 6492506
                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
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Matches :
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TITLE OF INVENTION: Rh(D)-BINDING PROTEINS AND MAGNETICALLY ACTIVATED CELL
TITLE OF INVENTION: SORTING METHOD FOR PRODUCTION THEREOF
FILE REFERENCE: 09596-42U2
CURRENT APPLICATION NUMBER: US/09/240,274
CURRENT FILING DATE: 1999-01-29
EARLIER APPLICATION NUMBER: 60/081,380
EARLIER FILING DATE: 1998-04-10
EARLIER APPLICATION NUMBER: 60/028,550
APPLICANT: Cole, Stewart
APPLICANT: Buchrieser-Brosch,
APPLICANT: Gordon, Stephen
APPLICANT: Billault, Alain
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NUMBER OF SEQ ID NOS: 224
SOFTWARE: Patentin Ver. 2.0
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NAME/KEY: unsure
LOCATION: (vario)
                                                                                                                                                                                                                              292 CGAACGTTCGAGA 280
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                                                                                                                                                                                                                                                                                                                                61.9%;
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Pred. No.
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; FEATURE:
; NAME/KEY: unsure
; LOCATION: (various p
; OTHER INFORMATION: a
US-09-670-314-260
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US-09-252-991A-16046
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CURRENT APPLICATION NUMBER: US/09/670,314
CURRENT FILING DATE: 2001-01-12
PRIOR APPLICATION NUMBER: 09/060,756
PRIOR FILING DATE: 1998-04-16
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                                                                                                                                                                       Sequence 9162, Application US/09252991A Patent No. 6551795
                                                                                                                                                     GENERAL INFORMATION:
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            CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: MARC J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
                                                                       APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 462
TYPE: DNA
ORGANISM: Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 321
TYPE: DNA
ORGANISM: Mycobacterium tuberculosis
APPLICATION NUMBER: FILING DATE: 1998-
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1998-02-18
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100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                          61.9%; Score 13; 100.0%; Pred. No.
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27;
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FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-07-27
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 16554
LENGTH: 762
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US-09-252-991A-16554/c
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US-09-252-991A-9246/c
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APPLICANT: Marc J.
TITLE OF INVENTION:
TITLE OF INVENTION:
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NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 9162
LENGTH: 573
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Best Local Similarity
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TYPE: DNA
ORGANISM: Pseudomonas aeruginosa
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NAME/KEY: unsure
LOCATION: (17)
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                                                                                                                                                                                     Rubenfield et al.

NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
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NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
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Pred. No.
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ORGANISM: Pseudomonas aeruginosa

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US-09-107-532A-1566
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                                                                                                                           SEQUENCE DESCRIPTION: SEQ.ID NO: US-09-107-532A-1566
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GENERAL INFORMATION:
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Patent No. 6583275
                                                               Matches
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Best Local
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                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/051571
FILING DATE: July 2, 1997
ATTORNEY/AGENT INFORMATION:
NAME: Ariniello, Pamela Deneke
REGISTRATION NUMBER: 40,489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/107,532A FILING DATE: 30-Jun-1998 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                        TOPOLOGY: circular MOLECULE TYPE: DNA (genc HYPOTHETICAL: NO ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: GTC-012
TELECOMMUNICATION INFORMATION:
TELEPHONE: (781)893-5007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                            ORIGINAL SOURCE:
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Similarity 100.0%; P
13; Conservative 0;
GTCGAACGTTCGA 253
                               GTCGAACGTTCGA 15
                                                                                                                                                                                                                                                                                                      LENGTH: 813 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
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OPERATING SYSTEM: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: Massachusetts
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CITY: Waltham
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                                                                                                                                                                              NAME/KEY:
                                                                                                                                                                                                            ORGANISM: Enterococcus faecium
                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX:
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                                                                                                                                                             OCATION:
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                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                                                                      (781)893-8277
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(B) LOCATION 1...813
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                                                                            61.9%; Score 13; 100.0%; Pred. No.
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AND AMINO ACID SEQUENCES RELATING TO
FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                              1566:
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Best Local Similarity
Tatches 13; Conserve
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US-09-252-991A-9074/c
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US-09-252-991A-8921
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APPLICANT: Marc J. Rubenfield et al.

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID

TITLE OF INVENTION: ARRUGINOSA FOR DIAGNOSTICS A
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NUMBER OF SEQ ID NOS:
SEQ ID NO 8921
LENGTH: 1221
                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 9074
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 9074, Application US/09252991A Patent No. 6551795
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CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Marc J.
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
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                                                                                                                                            NAME/KEY: unsure
LOCATION: (951), (10
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: unsure
LOCATION: (458)
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Pseudomonas
                                                                                                                                                                                                               TYPE: DNA ORGANISM: Pseudomonas aeruginosa
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                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                              ENGTH: 1461
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212
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                             6 GAACGTTCGAGAT 18
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GAACGTTCGAGAT 200
                                                                 Conservative
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                                                                                                                                                                 (1078)
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NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
                                                                                                                                                                                                                                                                                                                             UMBER: US 60/074,788
1998-02-18
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                                                                                                                                                Identity of nucleotide at the above locations
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                                                                                100.0%;
                                                                                                 61.9%;
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                                                                                Score 13; ; Pred. No.
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RESULT 20 US-09-252-991A-8710 ; Sequence 8710, Application US/09252991A

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                                                                                                                                                                           RESULT 22
US-09-252-991A-15954
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                  GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 16328
LENGTH: 1986
TYPE: DNA
ORGANISM: Pseudomonas aeruginosa
                                                                                                                                Sequence 15954, Application US/09252991A Patent No. 6551795
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LENGTH: 1545
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GENERAL INFORMATION:
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CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATITIES OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE:
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CURRENT APPLICATION NUMBER: US/09/252,991A
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les 13; Conserv
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o. 6551795
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ilarity 100.0%;
Conservative (
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NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
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24;
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CURRENT FILING DATE: 1999-02-
PRIOR APPLICATION NUMBER: US
PRIOR APPLICATION NUMBER: US
PRIOR APPLICATION NUMBER: US
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ:ID NO 15954
LENGTH: 2091
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US-09-171-461-1
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APPLICANT: Cotten, Matthew
APPLICANT: Chiocca, Susanna
APPLICANT: Chiocca, Susanna
APPLICANT: Kuzzbauer, Robert
APPLICANT: Schaffner, Gotthold
ITLE OF INVENTION: Chicken Embryo Lethal Orphan (CELO) Virus
FILE REFERENCE: 0652.1800000
CURRENT APPLICATION NUMBER: US/09/171,461
CURRENT FILING DATE: 1999-01-12
EARLIER APPLICATION NUMBER: PCT/EP97/01944
EARLIER FILING DATE: 1997-04-18
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                                              LOCATION: (21102)
OTHER INFORMATION: /gene:
                                                                                                                                                                                         NAME/KEY: gene
LOCATION: (17559)..(21754)
OTHER_INFORMATION: /gene: L3
                                                                                                                                                                                                                                                                                                                        NAME/KEY: gene
LOCATION: (15110)..(17495)
OTHER INFORMATION: /gene:
                NAME/KEY:
                                                                   NAME/KEY: misc_feature
LOCATION: (21102)
                                                                                                                         OTHER INFORMATION:
                                                                                                                                                           FEATURE:
NAME/KEY: misc_feature
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LOCATION: (17526)
                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: /note= L2 region penton base splice acceptor site
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LOCATION: (121)
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mes 13; Conserv
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misc_feature
(21123)
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1998-07-27
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                                                  /note= protease
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24;
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Patent No. 6218371
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                                                                                                                                                                                    GENERAL INFORMATION:
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APPLICANT: Krieg, Arthur M.
APPLICANT: Weiner, George
TITLE OF INVENTION: Methods and Products for Stimulating the
TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides
TITLE OF INVENTION: Cytokines
FILE REFERENCE: C1039/7026/HCL
CURRENT APPLICATION NUMBER: US/09/286,098
CURRENT FILING DATE: 1999-04-02
EARLIER APPLICATION UNMEER: US 60/080,729
EARLIER FILING DATE: 1998-04-03
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LOCATION:
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LOCATION: (23680)..(27886)
OTHER INFORMATION: /gene: L4
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LOCATION: (28363)..(31768)
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LOCATION: (21824)
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LOCATION: (31770)
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THER INFORMATION: / note= fibre splice acceptor site
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COCATION: (21882)
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LOCATION: (28341)
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(21836)
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; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= protease splice acceptor site
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20;
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US-08-882-704A-18
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US-09-325-193A-91/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: F
SEQ ID NO 91
LENGTH: 20
TYPE: DNA
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SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. 6406705
GENERAL INFORMATION:
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                                                                                                                                                                 Patent No. 5879906
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Use of Nucleic Acids Containing TITLE OF INVENTION: Unmethylated CpG Dinucleotide as FILE REFERENCE: C1039/7025/HCL CURRENT APPLICATION NUMBER: US/09/325,193A CURRENT FILING DATE: 1999-06-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 09/154,614 PRIOR FILING DATE: 1998-09-16 PRIOR ADDITOR
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APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-CPRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Synthetic Oligonucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                     APPLICANT: Jefferson, Richard A APPLICANT: Wilson, Katherine J. APPLICANT: Leader, Michael TITLE OF INVENTION: GLUCURONIDE NUMBER OF SEQUENCES: 19
                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
                                            STREET:
COUNTRY:
                                                          ADDRESSEE:
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12; Conservative
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           Seattle
Washington
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Krieg, Arthur M.
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                                             6300
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USA
                                            SEED and BERRY LLP 00 Columbia Center,
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100.0%;
                                                                                                       GLUCURONIDE
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                                                                                                                                                     Richard A.
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Pred. No.
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                                                                                                          REPRESSORS
                                             701
                                               Fifth Avenue
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GENERAL INFORMATION:
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                                                    TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEPAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 18:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY AGENT INFORMATION:
NAME: No. 5879906tenburg Ph.D., Carol
REGISTRATION NUMBER: 39,317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/882,704A
FILLING DATE: 25-UN-1997
CLASSIFICATION: 435
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: NO. 5879906tenburg Ph.D., Carol
REGISTRATION NUMBER: 39,317
REFERENCE/DOCKET NUMBER: 190106.404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Jefferson, Richard A. APPLICANT: Wilson, Katherine J. APPLICANT: Leader, Michael
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ELECTRIC (200)
                                                                                                                                                                                                                           APPLICATION NUMBER: US/08/882,704A FILING DATE: 25-JUN-1997 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Seattle
STATE: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TLE OF INVENTION:
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TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
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   STRANDEDNESS:
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12; Conserv

    Application US/08882704A
5879906

nucleic acid
EDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       57.1%; Score 12; DB 2; llarity 100.0%; Pred. No. 1.3e+(Conservative 0; Mismatches
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US-09-151-957-18/c
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US-09-151-957-18
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                                                   Sequence 18, Application US/09151957
Patent No. 6429292
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                  Query Match
Best Local 9
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Patent No. 6429292
GENERAL INFORMATION:
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Best Local
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TELEPAX: (206) 682-631
INFORMATION FOR SEQ ID NO: 18:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/151,957
FILING DATE: 11-Sep-1998
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/882,704
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: No. 6429292tenburg Ph.D., Carol
REGISTRATION NUMBER: 39,317
                                                                                                                                                                                                                                                Local Similarity
les 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
APPLICANT: Jefferson, Richard A.
Wilson, Katherine J.
Leader, Michael
                                                                                                                                                                                                                                                                                                                                      SEQUENCE DESCRIPTION: SEQ ID NO: 18:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 190106.404
TELECOMMUNICATION INFORMATION:
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ADDRESSEE: SEED and BERRY LLP
STREET: 6300 Columbia Center,
CITY: Seattle
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                                                                                                                                                                              TCGAACGTTCGA 19
                                                                                                                                                                                                                                                                                                                                                        LENGTH: 22 base pairs TYPE: nucleic acid STRANDEDNESS: single TOPOLOGY: linear
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Leader, Michael
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                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL
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                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                       COMPUTER READABLE FORM: MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                         APPLICANT: NIELSEN, JOHN
APPLICANT: MARCUSSEN, JAN
TITLE OF INVENTION: ALPHA-1,4-GLUCAN LYASE FROM
TITLE OF INVENTION: A FUNGUS INFECTED ALGAE, ITS PURIFICATION
                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 2: CORRESPONDENCE ADDRESS:
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MEDIUM TYPE: Floppy disk

COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/09/151,957
APPLICATION NUMBER: US/09/151,957
FILING DATE: 11-Sep-1998
CLASSIFICATION EXPLOYED: CURROWN>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/882,704
FILING DATE: CURROWN>
FILING DATE: CURROWN>
                                 OPERATING SYSTEM:
                                                         COMPUTER:
                                                                                                                                                                    CITY: Newport Beach
                                                                                                                                                                                            STREET:
                                                                                                                                COUNTRY:
                                                                                                                                                                                                        ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: NO. 642922tenburg Ph.D., Carol
REGISTRATION NUMBER: 39,317
REFERENCE/DOCKET NUMBER: 190106.404
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 682-6031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE DESCRIPTION: SEQ ID NO: 18:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: SEED and BERRY LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF NUMBER OF SEQUENCES: 19
                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19
                                                                                                                 92660
NRE: FastSEQ Version 1.5
APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity 100.
L2; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCGAACGTTCGA 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: nucleic acid STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Seattle
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/08633768A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 22 base pairs
                                                                                                                                                                                        E: Knobbe, Martens, Olson & Bear 620 Newport Center Drive 16th Floor
                                                                                                                                                                                                                                                                                                                                                             KRAGH,
                                                                                                                                                                                                                                                                                                                                                                                BOJSEN, KIRSTEN
                                                                                                                                  U.S.A.
                                                                                                                                                                                                                                                                                                                                             волко, мала
                                                     IBM Compatible
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                                                                                                                                                                                                                                                                                                                                                                   KARSTEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                57.1%; Score 12; DB 4; 100.0%; Pred. No. 1.3e+0 ative 0; Mismatches
                                     Sod
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.3e+02;
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RESULT 31
US-08-399-412A-58/c
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LENGTH: 71 base pairs
TYPE: nucleic acid
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FILING DATE: 15-OCT-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/71
FILING DATE: 10-JUNE-1991
CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                     OPERATING SYSTEM: MS-DOS
SOFTWARE: WordPerfect 5.1
CURRENT APPLICATION DATA:
                                                                                                     APPLICATION NUMBER: 07/53
FILING DATE: 11-JUNE-1990
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: High-Affinity Oligonucleotide
TITLE OF INVENTION: Ligands To Secretory Phospholipase
TITLE OF INVENTION: A2 (sPLA2)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: Genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION: TELEPHONE: 714-760-0404
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                                                  FILING DATE: 21-OCTOBER-: ATTORNEY/AGENT INFORMATION:
                                                                                                                                                             PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/399,412A FILING DATE: 6-MARCH-1995 CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER: DY
                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Englewood
STATE: Colorado
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE: 02-JUI
                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                               COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 80111
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                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                            IBM compatible
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                                                                                                                                                                                                                                                                                                                                                                                  Diskette,
                                                                   21-OCTOBER-1992
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                               Bernard
NUMBER:
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                                                                                      07/964,624
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                                                                                                                                                                                                                                                                                                                                                                              3.5 inch, 1.44 MB storage
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TELECOMMUNICATION INFORMATION:

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Query Match
Best Local Similarity
Thes 12; Conserve
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                                                                             US-08-633-768A-14
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 77 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                     NFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 160 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF CONTRESS:

CORRESPONDENCE ADDRESS:

ADDRESSEE: Knobbe, Martens, Olson & Bear

ADDRESSEE: Knobbe, Martens Drive 16th Floor
                                                                                                                                                                                                                                 NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER: DYC
TELECOMMUNICATION INFORMATION:
TELEPHONE: 714-760-0404
                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 9321301.5
FILING DATE: 15-OCT-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/0
FILING DATE: 02-JUL-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                            MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: ALPHA-1,4-GLUCAN LYASE FROM TITLE OF INVENTION: A FUNGUS INFECTED ALGAE, ITS PURIFICATION NUMBER OF SEQUENCES: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: NIELSEN, JOHN APPLICANT: MARCUSSEN, JAN
                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                    TELEPHONE: 714-760-04
TELEFAX: 714-760-9502
                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FABLSEQ Version 1.5
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ZIP: 92660
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                                                                                                         STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 77 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
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Local Similarity 100.0%;
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Newport Beach
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6013504
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BOJSEN, KIRSTEN
KRAGH, KARSTEN
MAJA
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                             57.1%;
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                              Score 12;
; Pred. No.
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                              1.1e+02;
                                               DB 3;
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nes 0; Indels
                                           Length 160;
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                Indels
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RESULT 35
US-09-313-294A-2857
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US-09-313-294A-2448
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; ORGANISM: Acinetobacter baumannii
US-09-328-352-3855
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US-09-328-352-3855/c
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SEQ ID NO 2448
LENGTH: 212
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APPLICANT: GARY L. Breton et al.
APPLICANT: GARY L. BRETON et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: GTC99-03PA
CURRENT APPLICATION NUMBER: US/09/328,352
CURRENT FILING DATE: 1999-06-04
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SEQ ID NO 3855
LENGTH: 186
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                                                                                                                                                                Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2448, Appearance Patent No. 64762:
                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Sherman, Bradley K.
TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN
FILE REFERENCE: PL-0017 US
                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/313,294A CURRENT FILING DATE: 1999-05-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Lalgudi, Raghunath V. APPLICANT: Ito, Laura Y.
                                                                                                                                                                                                                                                                      ORGANISM: Zea mays
                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                   NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No. 6476212 700552684H1
                                                                                                                                   Local Similarity
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les 12; Conserv
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                                                                                                                                    Conservative
                                                                                                                                                 57.1%;
                                                                    20
                                                                                                                                                  Score 12;
Pred. No.
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                                                                                                                                                                DB 4; Length 212;
                                                                                                                                                  1.1e+02;
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Sequence 2857, Application US/09313294A
Patent No. 6476212
GENERAL INFORMATION:

Ito, Laura Y. Sherman, Bradley K.

Lalgudi, Raghunath V.

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; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte I:
; NAME/KEY: USURE: USOFIE INFORMATION: 257
; LOCATION: 257
; OTHER INFORMATION: a, t, c,
US-09-313-294A-2857
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OTHER INFORMATION: Incyte II
NAME/KEY: unsure
LOCATION: 122, 140
OTHER INFORMATION: a, t, c,
US-09-313-294A-4896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Lalgudi, Raghunath V.
APPLICANT: Ito, Laura Y.
APPLICANT: Sterman, Bradley K.
APPLICANT: Sherman, Bradley K.
TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN EAR
FILE REFERENCE: PL-0017 US
CURRENT APPLICATION NUMBER: US/09/313,294A
CURRENT FILING DATE: 1999-05-14
NUMBER OF SEQ ID NOS: 7600
SOFTWARE: PERL PROGram
SEQ ID NO 4896
LENGTH: 283
                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 12
                                                                                           Sequence 69, Application US/09252991A
Patent No. 6551795
GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
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Best Local
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SEQ ID NO 2857
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              APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
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CURRENT FILING DATE: 1999-05-14
NUMBER OF SEQ ID NOS: 7600
CURRENT FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION:
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ORGANISM: Zea mays
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
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12; Conservative
                                                                                                                                                                                                                                                                                            6 GAACGTTCGAGA 17
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                                                                                                                                                                                                                                                                                                                                                 57.1%; Score 12; DB 4; 100.0%; Pred. No. 1.1e+
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US-09-252-991A-5259/c
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                                                                                                                                                                                                                                             PATENT INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Cole, Stewart
APPLICANT: Buchrieser-Brosch, Roland
APPLICANT: Gordon, Stephen
APPLICANT: Billault, Alain
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PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 69
LENGTH: 288
TYPE: - NW. 288
                                                       SOFTWARE: PatentIn Ver.
SEQ ID NO 563
LENGTH: 406
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SEQ ID NO 5259
LENGTH: 378
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                              CURRENT FILING DATE: 1998-04-16
NUMBER OF SEQ ID NOS: 743
                                                                                                                                                                          TITLE OF INVENTION: METHOD FOR ISOLATING A POLYNUCLEOTIDE OF INTEREST FROM TITLE OF INVENTION: THE GENOME OF A MYCOBACTERIUM USING A BAC-BASED DNA TITLE OF INVENTION: LIBRARY APPLICATION TO THE DETECTION OF MYCOBACTERIA FILE REFERENCE: 3495-0169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/252,991A CURRENT FILING DATE: 1999-02-18
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                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/060,756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Pseudomonas aeruginosa
FEATURE:
                TYPE: DNA ORGANISM: Mycobacterium tuberculosis
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; Pred. No.
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; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 3530
; LENGTH: 432
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-3530
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Best Local Similarity
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OTHER INFORMATION: applicants are uncertain of bases designated as
-09-060-756-563
                                                                                                                                      APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: ARRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
PRIOR FILING DATE: 1998-07-27
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CURRENT FILING DATE: 2001-01-12
PRIOR APPLICATION NUMBER: 09/060,756
PRIOR FILING DATE: 1998-04-16
NUMBER OF SEQ ID NOS: 743
SOPTWARE: Patentin Ver. 2.0
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APPLICANT: Billault, Alain
TITLE OF INVENTION: METHOD FOR ISOLATING A POLYNUCLEOTIDE OF INTEREST FROM
TITLE OF INVENTION: THE GENOME OF A MYCOBACTERIUM USING A BAC-BASED DNA
TITLE OF INVENTION: LIBRARY APPLICATION TO THE DETECTION OF MYCOBACTERIA
FILE REFERENCE: 3495-0169
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APPLICANT: Buchr
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OTHER INFORMATION: applicants are uncertain of bases designated as "n"
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Local Similarity 100.0%; Pred. No. 1.1e+02;
hes 12; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Buchrieser-Brosch, Roland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Stewart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 57.1%; Score 12; DB 4; L 100.0%; Pred. No. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
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SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 69
LENGTH: 658
TYPE: DNA
ORGANISM: Usnea florida
US-08-861-774E-69
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US-09-252-991A-4565
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Best Local Similarity
Matches 12; Conserv
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SEQ ID NO 4565
                                                              Matches
                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 69, Application US/08861774E Patent No. 6297007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 57.1%;
Best Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Marc J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. 655179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 4565, Application US/09252991A
                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/08/861,774E
CURRENT FILING DATE: 1997-05-22
NUMBER OF SEQ ID NOS: 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/252,991A CURRENT FILING DATE: 1999-02-18 PRIOR APPLICATION NUMBER: US 60/074,788 PRIOR FILING DATE: 1998-02-18 PRIOR APPLICATION NUMBER: US 60/094,190 PRIOR FILING DATE: 1998-07-27
                                                                                                                                                                                                                                                                               TITLE OF INVENTION: METHOD FOR ISOLATION OF BIOSYNTHESIS GENES TITLE OF INVENTION: BIOACTIVE MOLECULES FILE REFERENCE: 9993-006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: MARC J. RUBENFIELD et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Waters, Barbara APPLICANT: Miao, Vivian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 441
TYPE: DNA
ORGANISM: Pseudomonas aeruginosa
                                                                             Local Similarity
187
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                             10 GTTCGAGATGAT 21
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                                                              12;
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Ho, Yap
GTTCGAGATGAT 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTTCGAGATGAT 66
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                                                              ilarity 100.0%;
Conservative 0;
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100.0%; Pred. No. 1.1e+02;
                                                                                               57.1%;
                                                            $; Score 12; DB:
$; Pred. No. 1e+
0; Mismatches
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                                                                                             DB 3; Length 658;
                                                                                 1e+02;
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RESULT 45
US-09-107-532A-1566/c
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; OTHER INFORMATION: brCBF3 gene
US-09-198-119C-78
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SEQ ID NO 78
LENGTH: 806
                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1566, Application US/09107532A
PATCHI NO. 6583375
GENERAL INFORMATION:
APPLICANT: Lynn A Doucette-Stamm
TITLE OF INVENTION: NUCLEIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
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PRIOR APPLICATION NUMBER: US 08/706,270
PRIOR FILING DATE: 1998-09-04
PRIOR APPLICATION NUMBER: US 09/018,233
PRIOR FILING DATE: 1998-02-03
PRIOR APPLICATION NUMBER: US 09/017,816
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PRIOR APPLICATION NUMBER: US 09/018,234
PRIOR FILING DATE: 1998-02-03
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PRIOR APPLICATION NUMBER: US 09/018,235
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                OPERATING SYSTEM: <Unknown>
SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/107,532A
FILING DATE: 30-Un-1998
PRIOR APPLICATION DATA:
                                                                                                                                                        ZIP: 02354
COMPUTER READABLE FORM:
MEDIUM TYPE: CD/ROM ISO9660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 73
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            692 ACGITCGAGATG 703
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    Application US/09198119C
6417428

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APPLICATION NUMBER: 60/085,598
                                                                                                                                         COMPUTER:
                                                                                                                                                                                                                                             STATE: Massachusetts
                                                                                                                                                                                                                                                                STREET: 100 Beaver Street CITY: Waltham
                                                                                                                                                                                                                          COUNTRY: USA
                                                                                                                                                                                                                                                                                                          ADDRESSEE: GENOME THERAPEUTICS CORPORATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Zarka, Daniel
Jiang, Cai-Zhong
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UMBER: US 09/017,575
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AND AMINO ACID SEQUENCES RELATING TO
FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 4; Length 806;
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; NAME/KEY: misc_feature; LOCATION: (B) LOCATION 1...813; SEQUENCE DESCRIPTION: SEQ ID NO: 1566: US-09-107-532A-1566
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US-09-198-119C-84
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Best Local Similarity 100.
Matches 12; Conservative
                                                                                                    SOFTWARE:
SEQ ID NO 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 84, App
Patent No. 64174
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                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Plant Having Altered Environmental Stress Tolerance FILE REFERENCE: 19117.713 Seq List CURRENT APPLICATION NUMBER: US/09/198,119C CURRENT FILING DATE: 1998-11-23 PRIOR APPLICATION NUMBER: US 08/706,270
                                                                                                                                                                 PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1998-0
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1998-0
                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 08/706,270
PRIOR FILING DATE: 1998-09-04
PRIOR APPLICATION NUMBER: US 09/018,233
PRIOR FILING DATE: 1998-02-03
PRIOR APPLICATION NUMBER: US 09/017,816
PRIOR APPLICATION NUMBER: US 09/018,235
PRIOR APPLICATION NUMBER: US 09/018,235
PRIOR EFILING DATE: 1998-02-03
                                                                                                                                           NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1998-
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1998-
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                                     LENGTH: 830
TYPE: DNA
ORGANISM: Brassica rapa
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OTHER INFORMATION: brCBF6 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
TELEPHONE: (781)893-5007
TELEPAX: (781)893-8277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AFILING DATE: 14 May 1998
AFILICATION NUMBER: 60/051571
AFILING DATE: July 2, 1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ANTI-SENSE: NO
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REGISTRATION NUMBER: 40,489
REFERENCE/DOCKET NUMBER: GTC-012
                                                                                                                            PatentIn Ver. 2.0
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Jaglo-Ottosen, Kirsten
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Jiang, Cai-Zhong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/09198119C
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1998-02-03
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IUMBER: US 09/017,575
1998-02-03
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                                                                                                                                                                                         US 09/018,234
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US-09-252-991A-5231/c
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                                                                                                                                                US-09-252-991A-5231
                                                                                                                                                            PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 5231
LENGTH: 981
TYPE: DNA
ORGANISM: Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 5994
                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION: APPLICANT: Marc J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 5994, Application US/09252991A Patent No. 6551795
GENERAL INFORMATION:
                                                                                         Query Match
Best Local
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                                                                                                                                                                                                                                                                                               FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
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TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-02-18
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Local Similarity 100.0%;
mes 12; Conservative (
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                                   GTCGAACGTTCG 14
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                                                                                        57.1%; Score 12; 100.0%; Pred. No.
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1e+02;
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                                                                                                           Length 981;
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TITLE OF INVENTION: NUCLEIC ACID AND AMINO A TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTI FILE REFERENCE: 10716.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILLING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR PILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 3539
SEQ ID NO 3539
TYPER: NUMBER: 1002
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US-09-091-097-37/c
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                                                  APPLICATION NUMBER: US/09/091
FILING DATE:
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: WEINER, MARC S.
REGISTRATION NUMBER: 32,181
REFERSNCE/DOCKET NUMBER: 1422
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-205-8000
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APPLICANT: TAKESA
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TELEFAX: 703-205-8050 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                           COUNTRY: USA
ZIP: 22040-0747
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
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APPLICANT: YASUEDA, HIROSHI
APPLICANT: YAMAGUCHI, HIDEYO
TITLE OF INVENTION: ANTIGENIC PROTEIN ORGINATING
TITLE OF INVENTION: MALASSEZIA
NUMBER OF SEQUENCES: 58
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CITY: F
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NVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
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ONISHI, YOSHIMI
KATO, IKUNOSHIN
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1e+02;
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                                                                           US-09-252-991A-16487
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US-09-252-991A-16116
                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
CURRENT FILING DATE: 1999-02-18
                                                                                                                                SEQ ID NO 16487
LENGTH: 1038
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Best Local Similarity
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LENGTH: 1038
 Best Local Similarity Matches 12; Conserv
                                     Query Match
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Best Local Similarity
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PRIOR APPLICATION NUMBER: US 6
PRIOR APPLICATION NUMBER: 1998-07-27
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                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR TILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
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TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                         NUMBER OF SEQ ID NOS:
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                                                                                        TYPE: DNA
ORGANISM: Pseudomonas aeruginosa
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STRANDEDNESS: double
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100.0%;
                 57.1%; Score 12; 100.0%; Pred. No.
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                   DB 4;
. 1e+02;
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1e+02;
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                                                                                            RESULT 54
US-09-252-991A-6391/c
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US-08-229-287-1
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Sequence 6391, Application US/09252991A Patent NO. 6551795
GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: AERUGINOSA FOR DIJ
                                                                                                                                                                                                                             Matches
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CLASSIFICATION: 435
CLASSIFICATION DATA:
PRIOR APPLICATION NUMBER: US 08/
FILING DATE: 25-MAY-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/
FILING DATE: 08-JAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: 415/857-1125
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1113 base pair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: US/08/229,287
                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Marcus-Wyner, Lynn
REGISTRATION NUMBER: 34,869
REFERENCE/DOCKET NUMBER: 13
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/354-3588
                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
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NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                         NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS:
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                                                                                                                                                                695 GTTCGAGATGAT 684
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                                                                                                                                                                                                                                                                                                                                                                                     nucleic acid
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975 California Avenue
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Murry, Lynn E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scarafia, Liliana E.
VENTION: VIRUS RESISTANT CORN PLANTS
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                                                                                                                                                                                                                           Conservative
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 Rubenfield et al.

NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
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                                                                                                                                                                                                                                            Score 12;
; Pred. No.
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1e+02;
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                                                                    TELEFAX: 302-//CIN INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 1303 base pairs
TYPE: nucleic acid
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 11, Application US/08793410 Patent No. 5955650
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PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
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CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
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TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: DISKETTE, 3.50 INCH
COMPUTER: IRM PC COMPATIBLE
OPERATING SYSTEM: MICROSOFT WINDOWS 95
SOFTWARE: MICROSOFT WORD VERSION 7.0A
CURRENT APPLICATION DATA:
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ANTI-SENSE:
                TOPOLOGIA TYPE: DN
                                                                                                                                                                          NAME: CHRISTENBURY, LYNNE M.
REGISTRATION NUMBER: 30,971
REFERENCE/DOCKET NUMBER: CR-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 302-992-5481
                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/10627
FILING DATE: AUGUST 25, 1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: E. I. DU PONT DI
STREET: 1007 MARKET STREET
CITY: WILMINGTON
STATE: DELAWARE
                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE:
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HTTZ, WILLIAM DEAN
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3ER: US 60/074,788
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUCLEOTIDE SEQUENCES OF CANOLA AND SOYBEAN PALMITOYL-ACP THIO-
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US-09-252-991A-64
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; ORGANISM: Acinetobacter baumannii US-09-328-352-943
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; LENGTH: 1362
; TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                        Sequence 64, Applicat Patent No. 6551795 GENERAL INFORMATION: APPLICANT: Marc J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: GATY L. Breton et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING
TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
                                                               Matches
                                                                                                                                                                                            SEQ ID NO 64
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                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/252,991A CURRENT FILING DATE: 1999-02-18 PRIOR APPLICATION NUMBER: US 60/074,788 PRIOR FILING DATE: 1998-02-18
                                                                                                                                                                                                                                                                                                                                     APPLICANT: MARC J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILE REFERENCE: GTC99-03PA
CURRENT APPLICATION NUMBER: US/09/328,352
CURRENT FILING DATE: 1999-06-04
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                                                                                                                                                                                                                                                                                                                             FILE REFERENCE:
                                                                                                                                       LENGTH: 1368
TYPE: DNA
ORGANISM: Pseudomonas aeruginosa
                                                                             Local Similarity
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928 CGAACGTTCGAG
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                               5 CGAACGTTCGAG 16
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                                                               Conservative
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                                                                             57.1%; Score 12; 100.0%; Pred. No.
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939
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RESULT 58 US-09-252-991A-6308/c ; Sequence 6308, Application US/09252991A ; Patent No. 6551795

GENERAL INF APPLICANT:

INFORMATION: NT: Marc J.

Rubenfield et al.

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RESULT 60
US-09-677-488A-7/c
                                                                                                                                                                                                                                                                                                                                                                                                    ; NAME/KEY: misc_feature
; LCCATION: (0)...(0)
; OTHER INFORMATION: permease, fully spliced cDNA
US-09-351-224E-7
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PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 6308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 11
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 7
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Best Local Similarity
                                                                                                                                             Sequence 7, Application US/09677488A Patent No. 6482621
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CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: 1998-02-18
PRIOR FILING DATE: 1998-02-18
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CURRENT APPLICATION NUMBER: US/09/351,224E
CURRENT FILING DATE: 1999-07-12
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             APPLICANT: Maddox, Joyce
APPLICANT: Gilliam, Jacob
APPLICANT: Folkerts, Otto
APPLICANT: Crasta, Oswald R.
TITLE OF INVENTION: Compositions and Methods for Fumonisin
                                                                     APPLICANT: Duvick, Jon
APPLICANT: Maddox, Jo:
APPLICANT: Gilliam, J:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Crasta, Oswald R.
TITLE OF INVENTION: Compositions and Methods for Fumonisin
TITLE OF INVENTION: Detoxification
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TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 1578
TYPE: DNA
ORGANISM: Exophiala spinifera
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Gilliam, Jacob
Folkerts, Otto
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100.0%;
 Detoxification
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Pred. No.
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US-09-252-991A-3548/c
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 7
 GENERAL INFORMATION:
APPLICANT: Marc J.
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                      Sequence 3548, Application US/09252991A Patent No. 6551795
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PRIOR FILING DATE: 1999-07-12
NUMBER OF SEQ ID NOS: 11
SOFTWARE: Factor
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APPLICANT: Gilliam, Jacob
APPLICANT: Folkerts, Otto
APPLICANT: Folkerts, Otto
APPLICANT: Crasta, Oswald R.
TITLE OF INVENTION: Compositions and Methods for Fumonisin
TITLE OF INVENTION: Detoxification
PILE REFERENCE: 35718/204101
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APPLICANT: Maddox, Jon
APPLICANT: Gilliam, Ji
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CURRENT APPLICATION NUMBER: US/09/677,488A
CURRENT FILING DATE: 2000-10-02
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CURRENT FILING DATE: 2000-10-02
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                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORCANISM: Exophiala spinifera
FEATURE:
FEATURE:
NAME/KEY: misc_feature
LOCATION: (0)...(0)
OTHER INFORMATION: permease, fully spliced cDNA
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NAME/KNY: misc_feature

LOCATION: (0)...(0)

OTHER INFORMATION: permease, fully spliced
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TYPE: DNA
ORGANISM: Exophiala spinifera
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Rubenfield et al.
NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
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GENERAL INFORMATION:
APPLICANT: Duvick, Jon
APPLICANT: Maddox, Joyce
APPLICANT: Gilliam, Jacob
APPLICANT: Folkerte, Otto
APPLICANT: Crasta, Oswald R.
APPLICANT: Crasta, Oswald R.
TITLE OF INVENTION: Compositions and Methods for Fun
TITLE OF INVENTION: Detoxification
FILE REFERENCE: 35718/204100
CURRENT APPLICATION UMBER: US/09/677,488A
CURRENT FILING DATE: 2000-10-02
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US-09-351-224E-6/c
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TITLE OF INVENTION: Compositions and Methods for Fumonisin TITLE OF INVENTION: Detoxification
FILE REFERENCE: 5718-11

CURRENT APPLICATION NUMBER: US/09/351,224E

CURRENT FILING DATE: 1999-07-12

NUMBER OF SEO ID NOS: 11

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 6.7
                                                                                                                                                                                              Sequence 6, Application US/09677488A Patent No. 6482621
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Best Local Similarity
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Best Local Similarity
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Patent No. 6388171
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ORCANISM: Exophiala spinifera
FEATURE:
FEATURE:
NAME/KEY: misc_feature
LOCATION: (0)...(0)
OTHER INFORMATION: permease, partially spliced cDNA
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APPLICANT: Gilliam, Jacob
APPLICANT: Folkerts, Otto
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3ER: US 60/074,788
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RESULT 66
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SOFTWARE: FastSEQ for
SEQ ID NO 6
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APPLICANT: Maddox, Joyc
APPLICANT: Gilliam, Joc
APPLICANT: Folkerts, Ot
APPLICANT: Crasta, Oswa
                                               Sequence 1, Application US/07754918A

Patent No. 5286484

GENERAL INFORMATION:
APPLICANT: Rodriguez,R.S. et al
TITLE OF INVENTION: NUCLEOTIDE SEQUENCE CODING FOR AN
TITLE OF INVENTION: OUTER MEMBRANE PROTEIN FROM NEISSERIA MENINGITIDIS AND USE
TITLE OF INVENTION: OF SAID PROTEIN IN VACCINE PREPARATIONS
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Best Local :
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Best Local Similarity
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TITLE OF INVENTION: Compositions and Methods for Fumonisin TITLE OF INVENTION: Detoxification

FILE REFERENCE 35718/204101

CURRENT APPLICATION NUMBER: US/09/677,682B

CURRENT FILING DATE: 2000-10-02

PRIOR APPLICATION NUMBER: 09/351,224

PRIOR FILING DATE: 1999-07-12

NUMBER OF SEQ ID NOS: 11
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NAME/KEY: misc_feature
LOCATION: (0)...(0)
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TYPE: DNA
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                                  NUMBER OF SEQUENCES:
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wes 12; Conserv
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Folkerts, Otto
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tive 0; Mismatc
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Michaelson, Spivak and Wallace, Esq
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; NAME/KEY: CDS
; LOCATION: (134)...(1774)
US-09-555-000-1
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Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION: APPLICANT: Genenco:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                         SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                               Sequence 1, Application US/09555000 Patent No. 6489108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1998-1
NUMBER OF SEQ ID NOS: 2
                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/555,000
CURRENT FILING DATE: 2000-05-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/07/7:
FILING DATE: 19910905
CLASSIFICATION: 424
ATTORNEY/AGENT INFORWATION:
NAME: Michaelson, Peter L.
REGISTRATION NUMBER: 30090
                                                                                                                                                                                                                                                                                                                            APPLICANT: Genencor International, Inc.
TITLE OF INVENTION: Proteases from Gram Positive Organisms
                                                                                                                                                                                                            SOFTWARE:
                                                                                                                                                                                                                                                                                                             FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NFORMATION FOR SEQ ID NO:
                                                                                                                      FEATURE:
                                                                                                                                      ORGANISM: Bacillus subtilis
                                                                                                                                                       TYPE: DNA
                                                                                                                                                                         ENGTH: 1900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: 9
ORIGINAL SOURCE:
ORGANISM: N. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PS/2 Model 80
OPERATING SYSTEM: MS-DOS 5.0
SOFTWARE: Microsoft Word 5.5
CURRENT APPLICATION DATA:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (908)530-6671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: N. meningitidis group B IMMEDIATE SOURCE: Strain B:4:P1:15 isolated FEATURE: From 1 to 1830 bp mature protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM: Solve IBM compatible diskette
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OPERATING SYSTEM:
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OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: NUCLEOTIDE WITH CORRESPONDING AMINO ACID STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX:
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Road, P. O. Box 8489
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   Conservative
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100.0%;
57.1%; Score 12;
100.0%; Pred. No.
tive 0; Mismatcl
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                     DB 4;
97;
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US-08-358-117-1/c
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                                                                                                                                                                                                                                                         RESULT 69
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                                                                                                                                                                                                Sequence 1, Application US/08470588 Patent No. 6100446
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Best Local Similarity
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Patent No. 5608147
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: STREBE
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                APPLICANT: TIMMIS, KENNETH N.
APPLICANT: ZENK, MEINHART H.
TITLE OF INVENTION: MICCOORGANISMS AND PLASMIDS FOR
TITLE OF INVENTION: MICCOORGANISMS AND PLASMIDS FOR
TITLE OF INVENTION: 2,4-DICHLOROPHENOXYACETIC ACID (2,4-D) MONOOXYGENASE
TITLE OF INVENTION: FORMATION AND PROCESS FOR THE PRODUCTION OF THESE PLASMIDS
TITLE OF INVENTION: AND STRAINS
NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
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NAME: Esmond, Robert W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
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                  CORRESPONDENCE ADDRESS
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TELEPHONE: 140-
TENEX: (202)
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LOCATION:
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FILING DATE: 15-DEC-1994
CLASSIFICATION: 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER: 32, REFERENCE/DOCKET NUMBER:
ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
                                                                                                                                                            STREBER, WOLFGANG R.
                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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751..1611
FROMMER LAWRENCE & HAUG LLP
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                                                                                                                                                                                                                                                                                                                                                                                 57.1%; Score 12; DB 100.0%; Pred. No. 97 tive 0; Mismatches
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tfdA Gene Selectable Markers in Plants and the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kessler, Goldstein &
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COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk

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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -08-528-026C-3/c
                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 01
PRIOR FILING DATE: 1995-03-31
NUMBER OF SEQ ID NOS: 4
SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                     FILE REFERENCE: 9900-0002.20
CURRENT APPLICATION NUMBER: US/08/528,026C
CURRENT FILING DATE: 1995-09-13
                                                                                                                                                                                                                                                                                        APPLICANT: FUJII, I
                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 212-588-0500 INFORMATION FOR SEQ ID NO: 1:
                                           NAME/KEY: misc feature
LOCATION: (385)..(392)
OTHER INFORMATION: S SD sequence
                                                                                                   TYPE: DNA
ORGANISM: Bacillus stearothermophilus (Strain TRBE14)
OTHER INFORMATION: P CDS
             NAME/KEY: misc_feature
LOCATION: (402)..(2357)
                                                                                                                                            ENGTH:
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LENGTH: 2058 base pair
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/0:
FILING DATE: 07-JUN-1995
CLASSIFICATION: 800
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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les 12; Conserv
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TOPOLOGY: li
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TYPE: nucleic acid
STRANDEDNESS: single
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REGISTRATION NUMBER: 28,02
REFERENCE/DOCKET NUMBER: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE:
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TAKAHA, Takeshi
YANASE, Michiyo
OKADA, Shigetaka
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                                                                                                                                                                                                                                                                                                                        NAKAMURA, Hiroyasu
                                                                                                                                                                                                                                                                                                       FUJII, Kazutosh
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                                                                                                                                                                                                                                                                                        GLUCAN HAVING CYCLIC STRUCTURE AND METHOD FOR PRODUCING THE SAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                57.1%,
100.0%; Pr
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US-09-221-017B-225
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Patent No.
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Matches
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: PD1546

FILING DATE: 30-JAN-1998

PRIOR APPLICATION DATA:
APPLICATION NUMBER: PD2911

FILING DATE: 09-APR-1998

PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/AU98/01023

APPLICATION NUMBER: PCT/AU98/01023

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TELEX: 706141
INFORMATION FOR SEQ ID NO:
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TITLE OF INVENTION: P. GINGIVALIS NUCLEOTIDES AND USES THEREOF NUMBER OF SEQUENCES: 1120
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 2572 base pairs
TYPE: nucleic acid
STRANDENNESS: double
                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                             ANTI-SENSE: UNI
ORIGINAL SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: 650-813-5600
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SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/221,0178
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                                                                                                                                                                                                                                                                                                          MOLECULE
HYPOTHETICAL: NO
COMMERCE: UNKNOWN
                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: UN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: PRIOR APPLICATION DATA:
Local Similarity 100.0%;
nes 12; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Monroy, Gladys H
REGISTRATION NUMBER: 32
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                      NAME/KEY: misc_feature
LOCATION: 1...2572
                                                                                                                                                                                                                                                              ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 94304-1018
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                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY:
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STREET: 755 PAGE MILL ROAD
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). 6444799
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                                 57.1%; Score 12; DB 4; Length 2572; 100.0%; Pred. No. 95;
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GTTCGAGATGAT

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RESULT 73
US-09-221-017B-462/c
; Sequence 462, Application US/09221017B
; Patent No. 6444799
; Patent No. 6444799
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US-09-619-353-13
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SEQ ID NO 13
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CURRENT APPLICATION NUMBER: US/09/619,353
CURRENT FILING DATE: 2000-07-19
PRIOR APPLICATION NUMBER: 60/144,766
PRIOR FILING DATE: 1999-07-20
NUMBER OF SEQ ID NOS: 14
SOFFWARE: DATE: 14
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APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:

GENERAL INFORMATION:

ROSS, Bruce C.

TITLE OF INVENTION: P. GINGIVALIS NUCLEOTIDES AND USES THEREOF

NUMBER OF SEQUENCES: 1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Isacoff, Ehud Y.
APPLICANT: Dittman, Andrew H.
APPLICANT: Fan, Jinhong
TITLE OF INVENTION: Odorant Receptors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Brachydanio rerio (zebrafish)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: CDS
LOCATION: (4)
                                                                                                                                               COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows
SOFTWARE: FastSEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: PP1182
FILING DATE: 31-DEC-11997
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                      ZIP: 94304-1018
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ENGTH: 2595
                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FOERSTER
APPLICATION NUMBER: PP1546
FILING DATE: 30-JAN-1998
                                                                                                   FILING DATE: 2
CLASSIFICATION:
                                                                                                                                                                                                                                                                                     STREET: 755 PAGE
CITY: Palo Alto
STATE: CA
                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                       COUNTRY:
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No. 6410249
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                                                                                                                    23-DEC-1998
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100.0%; Pred. No.
                                                                                                                                      US/09/221,017B
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FILE REFERENCE: 107196.136

CURRENT APPLICATION NUMBER: US/09/252,991A

CURRENT FILING DATE: 199-02-18

PRIOR APPLICATION NUMBER: US 60/074,788

PRIOR FILING DATE: 1998-02-18

PRIOR FILING DATE: 1998-07-27

NUMBER OF SEQ ID NOS: 33142

SEQ ID NO 3523

LENGTH: 2832

TYPE: DNA

ORGANISM: Pseudomonas aeruginosa

US-09-252-991A-3523
RESULT 75
US-08-936-165A-66/c
; Sequence 66, Application US/08936165A
; Patent No. 6348582
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Best Local Similarity
Warches 12; Conservat
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US-09-252-991A-3523
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GENERAL INFORMATION:
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TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELAT:
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 2760 base pairs
TYPE: nucleic acid
STRANDENNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: 09-APR-PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ANTI-SENSE: UNI
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: 650-813-5600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 10-DEC-1998
ATTORNEY/AGENT INFORMATION:
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Local Similarity 100.0%; P
hes 12; Conservative 0;
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REGISTRATION NUMBER: 32,430
REFERENCE/DOCKET NUMBER: 27
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                                                                                                       1490 CGTTCGAGATGA 1501
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NUCLEIC ACID AMD AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
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; Pred. No.
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; Pred. No.
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                                                                                                                                                                                                          DB 4;
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INFORMATION FOR SEQ ID NO: 66:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
SENGTH: 2854 base pairs
TYPB: nucleic acid
TYPB: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: Genomic DNA
US-08-936-165A-66
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Search completed: December 17, 2003, 10:01:51 Job time : 67 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: USA
ZIP: 19406-0939
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/936,165A
FILING DATE: 24-SEP-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION UMBER: 60/027,032
FILING DATE: 24-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Gimmi, Edward R
REGISTRATION NUMBER: 950549
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-270-4478
TELEPHONE: 610-270-4478
                                                                                                                                                                               Query Match 57.1%; Score 12; DB 4; Length 2854; Best Local Similarity 100.0%; Pred. No. 95; Matches 12; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Black,
APPLICANT: Burnhau
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Pratt, Julie
APPLICANT: Pratt, Julie
APPLICANT: Reichard, Richard
APPLICANT: Resemberg, Martin
APPLICANT: Ward, Judith
TITLE OF INVENTION: No. 6348582el Prokaryotic Polynucleotides,
TITLE OF INVENTION: Polypeptides and Their Uses
NUMBER OF SEQUENCES: 534
CORRESPONDENCE ADDRESS:
ADDRESSEE: SmithKline Beecham Corporation
STREET: 709 Swedeland Road
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 709 Swederand CITY: King of Prussia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 610-270-5090
                                                                                         1984 CGTTCGAGATGA 1973
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Lonetto, Michael
Nicholas, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Burnham, Martin
Hodgson, John
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Black, Michael
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Luis Page Blank (uspto)